Lectures
ON
CERTAIN POINTS IN THE CLINICAL EXAMINATION OF THE URINE.

By WILLIAM ROBERTS, B.A., M.D. Lond.,
PHYSICIAN TO THE MANCHESTER ROYAL INFIRMARY, AND LECTURER ON PATHOLOGY IN THE MANCHESTER SCHOOL OF MEDICINE.

LECTURE III.

ON QUANTITATIVE SUGAR-TESTING IN THE URINE.

GENTLEMEN,—The estimation of the quantity of sugar in diabetic urine is a problem that has been sedulously studied, and at length fully solved. There are several methods in use, but only two can claim the twin merits of accuracy and facility.

In early times medical men judged of the sugar in diabetic urine by the amount of syrup yielded on evaporation. This was a very rude as well as troublesome proceeding. A much readier and not less precise method was to calculate the sugar from the specific gravity. Dr. Henry drew up a table, which Prout afterwards extended and improved, showing at a glance how much solid matter per pint was contained in urines at different densities. When the urine voided amounts to several quarts a day, and the natural urinary ingredients have sunk to a very low proportion, the secretion resembles a solution of grape-sugar in pure water. In this condition the density is a moderately accurate measure of the quantity of sugar; but it is still far from absolute correctness, as may be judged from the following table, drawn up from a number of my analyses:—

TABLE I. *shows the uncertain relation of the specific gravity to the proportion of sugar where the daily flow of urine ranged between nine and thirteen pints.*

Specific gravity.	Sugar per imperial pint.
1045	875 grains
1043	972 ,,
1042	683 ,,
1041	920 ,,
1041	931 ,,
1040	911 ,,
1039	683 ,,
1035	875 ,,
1034	645 ,,
1033	635 ,,

But when the flow of urine is no more than two or three pints a day, the natural ingredients come to hold something like their normal proportions, and contribute very sensibly to raise the density. Accordingly with the diminished flow there is a very greatly lessened proportion between the specific gravity and the per-centage of sugar. The annexed table shows this relation in the urines of the same patients as in Table I, when the daily excretion had been reduced by dietetic means to *between two and three pints.*

TABLE II. *shows the lessened and still more uncertain relation of the specific gravity to the quantity of sugar where the daily flow ranged between two and three pints.*

Specific gravity.	Sugar per imperial pint.
1044	625 grains
1042	553 ,,
1041	591 ,,
1041	498 ,,
1039	568 ,,
1039	608 ,,
1039	600 ,,
1039	446 ,,
1036	377 ,,
1035	471 ,,
1034	486 ,,
1034	512 ,,

On comparing these two tables, it is seen that the density holds a much less constant relation to the proportion of sugar when the daily flow is scanty than when it is abundant. It is also seen that in the former case a given degree of density indicates a much lower proportion of sugar than in the latter. The mean density in the first table is 1039·3, and in the second nearly the same—1038·6; but the proportion of sugar is much greater in the first, where it averages 813 grains per pint, than in the second, where it is only 511 grains.

Of the more accurate methods there are two, as I have already hinted, peculiarly eligible for practical use—the one on account of its speedy performance, and the other on account of its easy application.

The first of these is the volumetrical method, which has been brought to a high state of perfection by Fehling. It depends in principle on the fact that there is a fixed relation between the amount of a copper salt reduced to a state of suboxide and the sugar present. Fehling found that one equivalent of grape-sugar, or 180 parts, decomposed exactly ten equivalents, or 1246·8 parts, of sulphate of copper. Accordingly he prepared a solution of copper of standard strength, and applied it to fluids containing grape-sugar; and the quantity of these required to decompose a fixed volume of the standard solution furnished an exact measure of the sugar they contained.

I have employed Fehling's method a very great number of times, and have found, after a little practice in the manipulations, that it leaves nothing to desire on the score of accuracy or dispatch. Nevertheless, I question whether the great precision required in the preparation of the standard solution, and the want of practice on the part of medical practitioners in volumetrical analyses, will not always prevent this method from coming into common use at the bed-side, and confine it to the hands of a few specially instructed individuals.

The apparatus required for the performance of the volumetrical analysis embraces a graduated thousand-grain measure; a burette graduated in grains, and made to deliver about 250 measures. If a large number of analyses are contemplated, it is convenient to have a test-tube, marked off at 200 grains. In addition there are required, a glass flask capable of containing about three ounces, and the means of applying heat. The standard solution is prepared according to the following prescription:—

302·2 grains of crystallized sulphate of copper;
1212·6 grains of neutral tartrate of potash;
5500·0 grain-measures of solution of caustic soda, sp. gr. 1·12.

Dissolve the salts in the caustic soda, and add water up to 8750 grain measures, or one imperial pint.

200 grain-measures of this solution are exactly decomposed by one grain of grape-sugar.*

Having prepared the apparatus and the standard solution, the analysis is thus performed:—Measure off 200 grains of the standard solution in the marked test-tube, and pour into the little flask; then dilute with about three times its bulk of water, and apply heat. While this is being raised to the boiling point, the dilution of the diabetic urine, which is essentially necessary for the effective performance of the analysis, can be proceeded with. The readiest way of accomplishing this is to pour 100 grains of the urine into the thousand-grain measure, and to fill up with water to 1000 grains. A convenient dilution of one-tenth is thus obtained; and for all ordinary diabetic urines there is no need to depart from this standard dilution; but when the proportion of sugar sinks to a very low figure a less copious dilution becomes necessary.

The burette is now filled to zero with the diluted urine, and as soon as the blue solution begins to boil, it is added in successive portions until the blue colour has disappeared. After every fresh addition of diluted urine, the mixture must be again raised to the boiling point, and then a few moments allowed for the partial subsidence of the suboxide. By holding the flask between the eye and the light the persistence or abatement of the blue colour can be ascertained without waiting for the complete subsidence of the precipitate, and the entire experiment can be accomplished in from seven to ten minutes.

When the blue colour has disappeared, the level of the fluid in the burette is read off; this indicates the quantity of diluted urine used, and one-tenth of this is the amount of undiluted urine employed. Now, as the quantity of the standard solution used was 200 grain-measures, and as this required exactly one grain of grape-sugar for its decomposition, it is clear that the urine used in the experiment contained just *one grain* of grape-sugar; and accordingly the per-centage of sugar is ob-

* In grammes and cubic centimetres the prescription stands as follows:—
40 grammes—crystals of sulphate of copper;
160 grammes—neutral tartrate of potash;
720 grammes—caustic soda, sp. gr. 1·12.
Add water up to 1154·5 cubic centimetres.
Each 10 cubic centimetres corresponds to 0·05 gramme of grape-sugar.

tained by dividing 100 by the number of grain-measures of undiluted urine used in the analysis. Let the following example afford an illustration:—

Diluted urine required to decompose 200 grs. of the standard solution	120 gr.-meas.
This contains of undiluted urine one-tenth	= 12 ,,
12 grs. of the urine therefore contain 1 gr. of grape-sugar, which yields a per-centage of $\frac{100}{12}$	= 8·3

The most serious drawback to this accurate and expeditious method is the liability of the standard solution to deterioration by exposure to air, as already explained in the previous lecture.

The second of the two methods of estimating sugar which I have undertaken to explain combines, as I believe, more perfectly than any other the twin advantages of ease and accuracy. It is founded on the diminution of density suffered by saccharine urine when fermented with yeast. The specific gravity of a diabetic urine ranges from 1035 to 1045 or 1050. When it has undergone fermentation, and all the sugar is converted into alcohol and carbonic acid, the specific gravity is found to have sunk to 1009, to 1002, or even below 1000. This falling off in density arises from two distinct yet necessarily associated causes—namely, first, the destruction of the sugar, which was the cause of the high density of the original urine; and, secondly, the presence of the generated alcohol in the fermented product. Now, the loss of density from these causes must evidently stand proportional to the quantity of sugar originally present in the urine, and must consequently furnish a measure of its quantity.

I propose to call this mode of estimating sugar the *Clinical Method*, to distinguish it from the old fermentation method by flask and chloride-of-calcium tube, which is now abandoned for better processes.

The experimental facts on which the clinical method is based are fully detailed in a paper published in the "Memoirs of the Manchester Literary and Philosophical Society," for 1860; also in a paper in the *Edinburgh Monthly Journal* for October, 1861. The mode of proceeding was—first, to ascertain by the volumetrical analysis, which I have just described, how much sugar was contained in a certain diabetic urine. The urine was then fermented by means of German yeast, its specific gravity having been previously ascertained. In twenty-four hours after the fermentation had ceased and the scum had subsided, the density was taken again, and by subtracting this from the density before fermentation, the "density lost" was ascertained. And it was found that for every grain of sugar contained in an ounce of urine, one degree of specific gravity had been lost. Experiments were multiplied on diabetic urine; corresponding experiments were made with solutions of sugar of known strength in healthy non-saccharine urine, and in pure water, and the issue of all was to establish the conclusion, that the number of degrees of "density lost" indicated as many grains of sugar per fluid ounce. A couple of examples will afford the best illustration.

1. A diabetic urine having a specific gravity of 1053·48, was found by the volumetrical analysis to contain 11·36 per cent. of sugar, which is equal to 49·64 grains per ounce. After fermentation the density was reduced to 1004·48, so that the "density lost" was 49 degrees; and 49 grains (neglecting decimals) per fluid ounce occasioned a fall of 49 degrees of density.

2. In the second example the specific gravity was not so high.

Specific gravity before fermentation... ...	1038·32
Sugar estimated by the volumetrical process	5·68 per cent.
Or per fluid ounce	24·82 grains.
Density after fermentation...	1013·56
Density lost	24·76

In round numbers, 25 grains of sugar per ounce caused the density to decline 25 degrees.

For clinical purposes this is a most convenient basis of calculation. Having ascertained the quantity of sugar per ounce by the number of degrees of density lost, the daily excretion of sugar is reached at once when the number of ounces of urine voided is known. If it is considered more convenient to estimate the sugar as so much per cent., the result of the experiment is obtained in this form by multiplying the "density lost" by the co-efficient 0·23. Thus, in the first of the quoted examples, the "density lost" was 49 degrees. This multiplied by 0·23, yields 11·27, which is the amount of sugar per 100 parts. Similarly, in the second example, $24·76 \times 0·23 = 5·69$.

In the practical application of the clinical method, the ordinary urinometer may be used for taking the densities; but it is well to choose one with a long scale, as some of those in use have very short ones, and it becomes impossible to read the density accurately. Still further precision may be attained by dividing the usual scale into two parts on separate instruments. I have had constructed for my own use two perfectly corresponding hydrometers, on one of which the scale ranges from 995 to 1025, and on the other from 1025 to 1055, each instrument covering 30 degrees of density. The scales are thus rendered so long, and the intervals between the lines so great, that in a clear urine the specific gravity can be easily read to a quarter of a degree; and even in the fermented urine, which does not regain its original transparency, but continues, at least for many days, more or less cloudy, it can be read with certainty to half a degree.

Another important point is to obviate errors from variations of temperature. If the density before and after fermentation be taken at widely different temperatures, an error of serious amount may creep into the analysis. The best mode of avoiding this is to put up a few ounces of the unfermented urine in a "companion phial," and to place this side by side with that set apart for fermentation, so that, at whatever temperature the fermented product may be when its density is observed, its unchanged *alter ego* stands near it for comparison at exactly the same temperature.

The most convenient way of proceeding is as follows: About four ounces of the saccharine urine are put into a twelve-ounce bottle, and a piece of German yeast about the size of a cobnut or small walnut is added to it. A great excess of yeast is used to hasten fermentation, but a little more or a little less does not sensibly affect the result. The bottle is then covered with a nicked cork (which permits the escape of the carbonic acid), and set aside on the mantelpiece or other warm place to ferment. Beside it is placed a tightly-corked four-ounce phial of the same urine without any yeast. In about twenty-four hours the fermentation will have ceased, and the scum cleared off or subsided. The fermented urine is then decanted into a cylindrical glass, and its specific gravity taken; at the same time, the density of the unfermented urine in the companion phial is observed, and the "density lost" ascertained. Fermentation is generally complete in about eighteen hours, if the locality is sufficiently warm; and it is desirable to remove the two phials into a cool place two or three hours before the densities are taken, in order that they may attain the temperature of the surrounding atmosphere.

The time actually consumed in determining the quantity of sugar in urine by the clinical method does not exceed four or five minutes, but the result must be waited for until the succeeding day; this is its chief disadvantage. Its application is so easy, that a medical friend, who was some time ago in attendance on a diabetic patient, was able to teach the patient's wife to make the analysis; every morning, when he came, she could give exact information as to the quantity of sugar excreted on the previous day.

In infirmary practice, I am in the habit of instructing the nurse to put up the two phials as already explained—one for fermentation and the other for comparison. She removes them from the mantelpiece and deposits them in the ward a couple of hours before my arrival. All that devolves upon me to do is to take the two densities and ascertain the difference. In this way an exact record of the sugar passed by a diabetic patient may be kept, with no more trouble or expenditure of time than is usually bestowed in the ordinary examination of a patient suffering from serious disease.

ON THE

VALUE OF PULSATION IN THE DIAGNOSIS OF TUMOURS.*

BY CHARLES H. MOORE, F.R.C.S.,
SURGEON TO THE MIDDLESEX HOSPITAL.

II.

A PULSELESS aneurism is, according to our common experience, a contradiction in terms; but it is not so in fact. If, as we have seen, there are cases in which even a vigorous pulsation is worthless as proof of the aneurismal nature of a tumour, there are others which show the possible absence of

* Extracted from the Clinical Lectures at the Middlesex Hospital.

that symptom from real aneurisms. These latter cases, of aneurisms without a beat, are more rare, indeed, than of solid tumours with one; but the recognition of them when they do occur is sometimes equally difficult. In contrast, therefore, with the pulsating tumours which we have already considered,* I propose now to offer you some illustrations of aneurisms without pulsation.

1. A woman, aged fifty-one, walking with a load on her head, felt "something snap" in her right calf. Pain in the part followed, and increased so much that she reached her home, a distance of some miles, with considerable difficulty. She did not lie up till the day but one afterwards, though pain continued and the leg had swelled. Two months subsequently, the swelling having gradually increased, and occasionally severe pain having been experienced, she was admitted into St. Bartholomew's Hospital.

From the knee to the ankle the leg was swelled, and about one quarter as large again as the opposite limb. The enlargement was confined to the back of the leg, and was limited by the heads of the gastrocnemius above and by the ankle below. It was tense, red, painful, and tender; and around the calf it gave an obscure impression of fluctuation; but no part of the limb seemed particularly thin. Neither anterior nor posterior tibial artery could be felt. On the day of her admission Mr. Lloyd distinguished a feeble bruit by means of the stethoscope, but it was not again heard, and no pulsation was ever perceptible in any part of the swollen limb.

In a month the lower part of the leg had subsided to nearly its natural dimensions, while the calf continued at least as large and tense as at first. A fortnight later the leg had evidently increased in girth, and had become generally softer. Between the heads of the gastrocnemius and about the tibial origin of the soleus the tissues seemed thinner than elsewhere. A very marked thrill on percussion and a sense of fluctuation had become perceptible. The pain was increased in severity, shooting, and principally nocturnal. The tenderness had much diminished, and the skin yielded a little greenish-yellow transparent gelatinous fluid. In a few days more, there was added to the other symptoms a considerable œdema of the dorsum of the foot. A grooved needle was passed into the calf, and a very little blood oozed out.

By the end of the fourth month of her illness, the patient had become sallow, haggard, thin, and weak. Her suffering was very great, the pain, though intermitting, being more severe. She had no rest, except when under the influence of opium. The leg, as well as the foot, was œdematous. Some cutaneous veins on the calf were enlarged; the skin was roughened by irregular thickening; in one part it bulged in a small, soft, smooth, shining excrescence, and the peculiar secretion from it had increased. A lancet was passed to its full length into the softened part at the tibial origin of the soleus, and a languid flow of blood issued from the wound. A probe could be readily passed more deeply through the orifice, and it moved about as in a cavity.

During the succeeding three weeks the wound healed, the pains lessened, the œdema increased, though not the calf, and the integuments became a little thinner. The patient improved in countenance and strength, and had quiet nights, though still not without opiates. Then followed a week of more severe pains than ever. They came on suddenly without apparent cause, were sharp, lancinating or shooting, and prolonged. The calf increased in measurement and almost in visible size every forty-eight hours.

Towards the end of the fifth month she was taken to the operating theatre, a tourniquet was placed lightly on the thigh, and the tumour was opened by an incision three inches long in the upper part of the calf. It contained coagulated blood. When the clot was disturbed by passing a finger through it, arterial blood gushed out rapidly and audibly. The femoral artery was immediately compressed, the tourniquet tightened, and the limb amputated by Mr. Vincent above the knee. The patient died of pyæmia on the fourteenth day after the operation.

The cavity in the limb was very large, and was filled with black coagulum. In front of it was the tibia, bare, rough, and, as it were, eroded. Behind it the soft structures of the calf were expanded, supporting a thin sac. The posterior tibial vessels lay with the nerve on the posterior wall of the sac. The blood had escaped from the posterior tibial artery by an aperture on its anterior surface, and near its upper end. The opening had the appearance of a longitudinal rent; its outline was fusiform, and it extended along the greater part of the vessel between the origins of the anterior tibial and the peroneal arteries. The tibio-fibular arch of the soleus was immediately above the sac; but it had not expanded. The nerve, therefore, before rising over the sac, was girt down and compressed against the tendinous edge of the arch. This position of the nerve appeared to explain the severity and character of the pain which had been suffered.

The difficulties attending the diagnosis of this case could hardly, I think, be exaggerated, and several consultations which were held upon it led rather to surmises than to positive and clear opinions as to its nature. The absence of pulsation, and the failure of the most delicate ear to detect any bruit after the day of the patient's admission, prevented the conclusion in its early stage that the disease was aneurismal: it then most resembled deep suppuration. Towards the end of the case—the explorations having proved it not to be an abscess—it seemed most likely that the elasticity of the general mass, the excrescences on the skin, the severe pain, and the sallowness of the countenance, belonged to medullary cancer; yet, in fact, it was aneurism—a pulseless aneurism.

For such a fact the examination of the limb furnishes but one explanation. It was not that blood did not enter the aneurism: that must have happened, for it grew. Nor was it that blood entered feebly and without a beat: without cardiac impulse the inrushing current could never have eroded bone. That which intercepted both the pulsation and the bruit must have been the distance from the surface at which they were produced, and the unsuitableness of the intervening structures for the conveyance of those signs, though they existed. In front were interposed the natural structures of the limb; laterally and behind was a considerable depth of coagulum, towards which moreover the blood, issuing from the opening in front of the artery, was not directed. Had the rent occurred in the back of the vessel, or the effused blood failed to coagulate, there would, in all probability, have been no perplexity respecting the nature of the disease.

This is the only case in which I have known an aneurism in one of the extremities fail to present a pulsation at some period of its history, or of its progress while under observation. The examples which follow illustrate various circumstances in which the usual aneurismal beat may be interrupted. Some of them throw additional light upon the case already related.

2. The stoppage of pulsation in an aneurism may be temporary or final. Of the former occurrence—that of a temporary cessation of the beat—there are but few examples; and their explanation cannot but be uncertain, inasmuch as with the return of the pulsation the cause of its interruption must have passed away. This very condition of the problem excludes from the rank of causes all permanent changes, whether in the artery, the sac, or the blood. To assign the stoppage of the aneurismal beat, therefore, to a filling of the cavity with black clot, or to a bulging of such clot through the opening in the artery, or to displacement of a mass of fibrin, can be no better than surmise. Nevertheless, it appears probable that pulsation rarely thus intermits, unless the cavity of the aneurism be much reduced in size; for the temporary interruption is commonly soon followed by a permanent cessation of the beat,—that is, by the cure of the aneurism.

3. The permanent and final cessation of the beat of an aneurism may occur from very various causes, and causes differing widely and seriously in their effect on the issue of the disease. The most formidable from its nature, and from the mortification, suppuration, or hæmorrhage to which it may lead, is that which occurred in the following case.

A man was in St. Bartholomew's Hospital with an unmistakeable popliteal aneurism. It filled the ham, was painful, was attended with bending of the knee and some swelling of the leg and foot, and freely pulsated. The patient had not long been admitted, and was awaiting the usual operation. One morning the whole knee and adjoining halves of the thigh and leg quickly became greatly swollen and very tense, the foot livid and cold, the pain much increased, and the pulsation entirely gone. Within six hours from the time at which this change in the condition of the limb had commenced, Mr. Lawrence tied the femoral artery, and the man got well.

Now of this case it was already known that the disease was an aneurism, when suddenly its pulsation was gone. The sac had burst, and the blood was driven through the rent into the tissues of the limb. The force of the arterial current in the artery and in the aneurismal cavity could have been little diminished, and a pulse must have existed in them as before the rending of the sac. It could not, however, be conveyed through blood when infiltered and perhaps coagulated in the limb. The beat was expended before reaching the surface upon the tense and elastic swelling. For a cardiac impulse to

* THE LANCET, *ante*, p. 453.

be felt, it must possess a force proportional to its depth from the surface, and to the nature of the intervening substance through which it is to be conveyed. The extravasation of the blood beyond the sac obliterated this necessary condition.

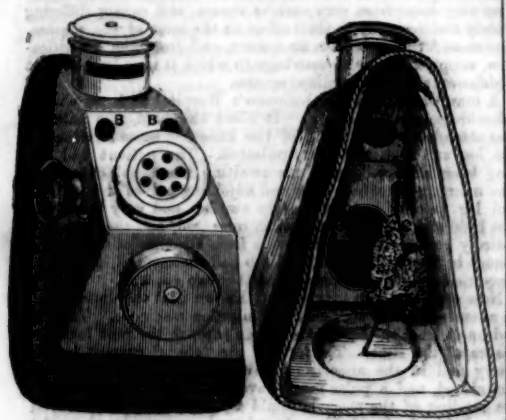
This class, however,—namely, of a final cessation of the beat of aneurisms,—is chiefly made up of more familiar facts, of cases in which the artery is known to have become obstructed. Whether the obstruction be by a tourniquet or a ligature, by spontaneous obliteration of the vessel, or by a change in another aneurism seated nearer the heart, is unimportant in the present point of view, and were it not for some variation in the effect of such obstructions, no further reference need be made to it. An aneurism cannot pulsate unless connected with a pulsating artery. But though after the ligature of the artery an aneurism may not pulsate, it may still grow. The collateral circulation may regain force enough to expand the sac, without giving it the characteristic arterial impulse. Mr. Prescott Hewett communicated a case of this kind to the Royal Medical and Chirurgical Society ("Medico-Chirurgical Transactions," vol. xxix.) An aneurism in the groin, for which Sir Benjamin Brodie had tied the external iliac artery, returned and increased, but never again pulsated. It was found to have arisen from the superficial femoral artery, between which and the ligature the epigastric, the circumflex iliac, and the profunda arteries remained open. Again, an aneurism filled with laminated coagulum does not pulsate; it has no cavity, and can admit no blood, as was the case in the previous examples. Beyond such a tumour the attendant swelling and venous distension of the limb are subsiding; the aneurism is shrinking, and is cured.

PARTURITION WITHOUT PAIN.

BY JAMES TOWNLEY, L.R.C.P. EDIN. (by Exam.)

FOR some time past my attention has been directed to the use of anæsthetics in parturition. I had often been requested by patients to administer chloroform to them during labour, but I had seen the ill effects of this drug in one instance so strongly and almost fatally developed that I shrank from its use. After considerable reflection on the subject, I thought that if a plan could be devised by which the anæsthetic agent should act only in deadening sensation, and not interfere with consciousness, it would be a boon to the accoucheur as well as to the patient. How was this to be effected? Two conditions appeared necessary for its accomplishment,—namely, a modification of the inhaler at present in use; and certain additions to the chloroform—additions which would reduce its strength, and give it a certain flavour. These two conditions I had not much difficulty in fulfilling. But there arose an obstacle of more serious moment: How, when, and for what time, was the inhalation to be made? I will now give an account, *seriatim*, of my inhaler, the anodyne fluid which I employ, and the mode in which I direct the inhalation to be made.

*The inhaler** is similar to one very commonly used in administering chloroform. It has, however, in addition, two tubes, an inch and a quarter long and a quarter of an inch in diameter, running parallel to the floor of the inhaler. These tubes, being placed above and to the sides of the inspiring valve, admit two small streams of fresh air, which to a great extent are inspired unmixed with the vapour of the anodyne. In the place of the grating there is a curved prong for retaining the sponge under the right tube and opposite the hole in the right side connected with the cup which receives the mixture to be inhaled. The object of this cup is—first, to receive the mixture, and direct it to the centre of the sponge. It has, in the second place, the advantage of helping to keep the inhaler cool by the patient making use of it to rest her thumb upon when she is inhaling. It will therefore be gathered from this that the patient herself always holds the inhaler.



A, cup; B, external opening of tubes; C, internal opening of tubes; D, sponge.

* Manufactured by Messrs. Weiss and Son.

The anodyne mixture which I have found to be the most manageable is composed as follows: Alcohol, two ounces; one drachm of aromatic tincture; with sufficient chloroform added, short of the production of a turbid state of the fluid. The object of adding the tincture is to make it pleasanter to inhale; the spice also appears to prevent the sickness which would otherwise sometimes arise from long-continued inhalation. By giving a little colour to the mixture, also, it prevents any accident that might arise by putting in by mistake pure for the modified chloroform. I prepare the aromatic tincture as follows: One drachm of nutmegs; two drachms of cloves; pterocarp chips, a drachm and a half; water, four ounces; alcohol, five ounces: mix.

Mode of administering the anodyne vapour.—The great object to be attained is to so far influence the nerves of sensation as to prevent pain, and yet not carry the anæsthetic agent to the extent of producing unconsciousness. This can be effected in the following manner:—The woman, in the upright or recumbent position, as the case may be, holds the inhaler in her right hand. She is then directed to take a full inspiration, and to apply the inhaler to the mouth and nose. She is then to breathe rapidly for six, eight, or more inspirations (the inspirations and expirations being equal) only with the diaphragm and abdominal muscles, the chest being kept a fixture all the time. The inhaler should then be removed immediately, and one or two full, deep, quick chest-inspirations taken. This will be found sufficient to relieve all pain, and there will be no loss of consciousness. During the entire process it is desirable to have a full light upon the face, to watch the countenance and feel the pulse occasionally, and observe the pupils. These, in some cases, are very quickly affected, and then the inhalation requires to be suspended for a time. During the time the process is going on, I am in the habit of giving a teaspoonful of brandy in a cup of weak tea with plenty of milk, and something to eat; or, instead, a glass of wine and a little cake or bread-and-butter, from time to time, to keep up the strength and prevent that sudden pallor of the face which sometimes occurs. I may add, as only a portion of the alcohol is taken up in vapour, it accumulates in the sponge, so that it is necessary occasionally to squeeze it out before adding a fresh quantity.

I can hardly attempt to explain clearly the *modus operandi* of the agent. Practically, however, it answers the purpose intended. The great point is, of course, to arrest its action before it produces unconsciousness. This is effected by using it as I have described. It is requisite that the patient be carefully watched, so that the moment for administering the agent may be seized. From the experience I have now had of its use, I can estimate pretty accurately the exact time the inhalation should be resumed or discontinued. After a little practice this knowledge can be obtained by any competent observer. I have now given my anodyne mixture in 216 cases, and without in any one instance seeing a bad result *quoad* the administration of the mixture. Of these cases many have come to me in consequence of the severity of their former labours, their extreme nervousness, and other causes.

I select a few instances from my note-book in which the anodyne was employed with complete and satisfactory effects:

1. The patient was in her twenty-ninth year, by no means robust, of a nervous temperament, and looking forward to her first labour with great apprehension.

2. Was in her thirty-third year, and looked forward to her first labour with great dread.

3. Her sixth labour; all her previous labours had been very severe.

4. Her tenth labour; her previous ones very severe, and each time followed by a great deal of after pain.

5. Her eighth labour; had suffered intensely in every previous one, in some of which she had been delivered with instruments; had had a protracted recovery after each labour.

6. Her seventh labour; inflammation had followed each of her former labours.

7. Her fifth and sixth labours; her former labours had been very severe.

8. Her third and fourth labours, her former labours having been very severe.

9. Her first labour; very strong expulsive pains; soft parts at first being very rigid, then gradually giving way after six hours' use of the inhaler.

10. Her third labour; child's head very large and firm; much exhaustion; delivered with the short forceps, very great force requiring to be used before the head could be extracted.

11. Her first labour; very nervous and timid; with difficulty could I get her to use the inhaler rightly, but she became much more composed towards the end, and inhaled very well. I have rarely seen stronger expulsive pains than she had towards the last; the arch of the pubes being rather contracted, and the child full-sized.

12. Her fourth labour; breech presentation; used the inhaler for three hours.

13. Her first labour; in her thirty-ninth year; very severe expulsive pains for nine hours; the last hour, owing to the size of the head and the contracted outlet, no progress was made; and, beginning to get exhausted, it was decided to use the forceps, which were accordingly sent for, but a few minutes before they arrived nature had overcome the difficulty; the child was born alive, but with a large caput succedaneum, showing how firmly it had been retained the last hour.

14. Had always had great suffering in her former labours; used the inhaler about three hours; breech presentation; placenta was adherent, and required great force to peel it off.

I have thus given the results of my experience with an agent calculated, under proper management, I venture to think, to be of great service in the practice of midwifery. I believe my experience with it has proved that—

1st. It is possible for a woman to be delivered with less pain from the beginning to the end of her labour than a rhubarb draught would occasion.

2nd. It is possible to afford that relief without interfering with the regular and natural action of the heart or brain.

3rd. It is possible for the child to be born without the mother experiencing any pain whatever, while at the same time she retains her consciousness and power to bear-down when told to do so; and her first knowledge of the birth of her child shall be from hearing it cry.

4th. That when a woman is confined without suffering pain, although she shall have had inflammation after each of six previous labours, the prevention of the suffering will have the effect of preventing the usual inflammation.

5th. That by preventing the suffering of labour, the woman does not lose her strength, and always has a speedy recovery.

Harleyford-place, Kennington, May, 1862.

ON A CASE OF

GUNSHOT WOUND OF THE CRANIUM, FOLLOWED BY SOME REMARKABLE PSYCHOLOGICAL PHENOMENA.

BY ROBERT KNOX, M.D.

THE following case, though by no means unique, yet presents some points of interest worthy, perhaps, of being recorded. The accident occurred on the ever memorable 18th of June, 1815, soon after which the patient came into my hands, remaining in Bruxelles until the close of the year, when, having in the meantime returned to France, he presented himself at the Hospital of the Gros-Caillou, of which my most esteemed friend the celebrated Baron Larrey was then head surgeon.

The treatment of the case whilst under Baron Larrey has been published by him in the first volume of his "Clinical Records," and as his account is full and succinct, I shall here quote it in his own graphic language. What took place whilst the patient was under my care in Bruxelles I shall state afterwards.

"Towards the close of the year 1815, a soldier named Louis Manez presented himself at the Hospital of the Gros-Caillou. He was twenty-four years of age, and was a brigadier of dragoons. He had been wounded on the 18th of June, 1815, at the battle of Waterloo, having been struck by a musket-ball on the left side of the forehead. The ball remained so firmly fixed in the frontal bone, about four or five lines above the left eyebrow, that all the usual means to extract the ball failed, and, the patient refusing to submit to the application of the trephine, it continued there until his death.

"I saw him again on the 28th of May, 1824. He was then a sergeant in the 6th Regiment of the Royal Guard. A small portion of the ball had been detached and came away; there remained only a small fistulous wound. He performed his daily duties as a sub-officer with the utmost care, regularity, and precision.

"When wounded, he remained for two days and nights on the field of battle without any assistance. He was removed from the field of battle by an inhabitant of Bruxelles, who called in a surgeon, and bestowed every attention on him until he left Bruxelles for the hospitals of Paris.

"He had all his mental faculties and bodily strength, with this exception, that he had lost the recollection of substantive nouns. He was instructor in the use of firearms of a company, each individual of which he knew perfectly, but occasionally he forgot their names, as well as other substantive nouns. He gradually also lost the faculty of hearing and of seeing on that side. From the date just mentioned until the 10th of November, 1827, I heard no more of Manez; it was then I learned from my *confrère*, Dr. Cornac, physician to the hospital, that Manez had died in a neighbouring ward in consequence of pulmonary consumption.

"I had some difficulty in recognising my former patient. His features were entirely changed; his hair had become as white as in a man of seventy-two. Separating the skull-cap from the rest of the cranium, we found—

"1st. The dura mater adhering strongly to all the internal surface of the cranium, and especially around the wound; the membrane was also much thicker and denser than natural.

"2nd. An excavation of about an inch and a half in diameter by four or five lines in depth at the summit and a little towards the temporal side of the anterior left lobe of the brain. This excavation was lined with a fine reddish membrane. The depressed portion of the brain was sound, as well as all the rest of the brain.

"3rd. The pedicle of the ball, on which might be seen the traces of the efforts made to extract it, extended, by a few lines, beyond the level of the periphery of the cranium; and the circumference of the orifice by which it had entered the cranium was worn away obliquely from without inwards, as if worm-eaten.

"4th. In the cavity of the cranium was an osseous eminence, formed by the reunion of three or four fragments of the inner table of the skull, united together by an osseous deposit."

I shall now add to this most graphic and carefully-drawn-up history of the case the circumstances which occurred to Manez from the time I first saw him in Bruxelles to the period when I received an order to close the wards of which I had care, and transmit the remaining wounded to France. This took place on or about the 25th of December, 1815.

I first saw Manez in the Hospital of the Gendarmerie of Bruxelles, of the first division of which I had charge until the closing of the hospital. He was an exceedingly handsome man, mild and intelligent; and he used to accompany me during my morning visit to the wounded (all Frenchmen), translating for me the *patois* of some Basque soldiers whose language I did not readily comprehend. I learned from him not only the circumstances under which he received the wound, but also many details—by an eye-witness, be it remarked—of the events of that terrible day. Many of these were confirmed by frequent conversations with the French officers whom I attended. From Manez I learned, if my memory be correct, that he was one of that heroic band of cuirassiers, who, if they had been well led, handled, and supported by the infantry, would have decided the action before two o'clock of the 18th. In a last attempt upon our artillery, he was riding up a hollow piece of ground under a heavy fire from the English infantry stationed immediately in front. Oppressed with heat, he incautiously raised his helmet for an instant, when he was struck on the left temple by a musket-ball, which brought him to the ground. When I first saw Manez in Bruxelles I remarked that he was fast losing power over the left eyelid, which drooped over the corresponding eye; the power of vision, also, of that eye was becoming weaker, and at times he was slightly confused; but he declined all attempts by operation to remove the ball, which I distinctly felt at the bottom of a fistulous wound of no great

depth. Under these circumstances he was left to his fate, although it is now clear that the ball ought to have been removed.

I have already alluded to the many conversations I have had with French and English officers who were wounded in that battle, and with the intelligent men (such as Manez) who belonged to the cuirassiers, the Imperial guard, &c.; and the conclusion arrived at was, that the cause of the loss of the battle was a mystery which no one could solve. Baron Larrey, in his Memoirs, affirms that as early as three or four o'clock in the afternoon traitors were scattered all about, endeavouring to alarm the troops; and the army knew well that Bourmont had deserted his country. But the wounded who returned to France at the close of that year were in good spirits, and talked freely of striking another blow for Napoleon the Great.

Hackney, April, 1862.

A Mirror
OF THE PRACTICE OF
MEDICINE AND SURGERY
IN THE
HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

WESTMINSTER HOSPITAL.

FOUR CASES OF DISEASE OF THE HIP-JOINT, FOR WHICH EXCISION WAS PERFORMED IN THREE.

(Under the care of Mr. HOLT.)

OF the various examples of disease of the hip-joint which present themselves for treatment at our hospitals, we have invariably recorded in our "Mirror" all those submitted to the operation of excision. Indeed, we have endeavoured to publish all the examples of the latter that have occurred since the operation was revived by Mr. Fergusson some years back. We have published alike the successful cases and the failures, and have omitted no instance of which we were cognizant. The testimony to the value of excision, therefore, as applied to the hip, from the evidence furnished by our metropolitan hospitals, may be looked upon as correct and perfectly reliable. We are particular in mentioning this, because, in a lecture on Resection of the Hip-joint delivered by M. Gosselin at Paris,* he stated that it was more than doubtful whether the hospitals of London have published all their unsuccessful cases, and the proportion of success obtained ought not to be received without reserve. We unhesitatingly assert that the hospital surgeons of London are as anxious to have their unsuccessful cases published as their successful ones, for the purpose of fairly testing the merits of the operation; and, from the testimony already collected in London and elsewhere, excision of the hip is now regarded as a measure in the highest degree beneficial—one that has accomplished great results sometimes in apparently the most hopeless cases, where not only the head of the femur but a considerable portion of the pelvis was involved. We may refer to Mr. Hancock's and Mr. Erichsen's cases recorded in previous numbers of this journal as remarkable instances of the kind.

Since the publication of our last series, six in number, all ending in recovery (THE LANCET, vol. i., 1861, pp. 85, 108), we have collected five others, which are now presented to the reader. These have likewise resulted in recovery thus far. In the whole five the pelvis was more or less involved, but especially in Mr. Holt's first two cases and in Mr. Fergusson's patient. In the first case of Mr. Holt the finger entered the pelvis through the removed acetabulum, and the child subsequently much improved in health. His second case was a very severe one, yet the recovery has been most satisfactory.

For the notes of the following four cases we are indebted to Mr. M. A. Conolly, house-surgeon to the hospital.

* A report of which appears in the Gazette Médicale of October 19th, 1861, p. 670.

I.—CARIES OF THE HIP-JOINT, PENETRATING THE ACETABULUM; EXCISION OF THE HEAD OF THE FEMUR AND ACETABULUM; RECOVERY.

William P——, aged eight years, a fair, emaciated child, was admitted Sept. 4th, 1861, with disease of the left hip-joint of three years' standing. Up to three years ago he was a healthy child, and had received no injury. The first indication of disease manifested itself by slight lameness, with pain referred to the knee, which, after rest and fomentations, subsided, and for a time he walked about as usual; but eventually the child became generally out of health, and suffered from "convulsions," and a return of the lameness and pain in the knee, for which he was under treatment at a dispensary for some time without benefit. He then became an in-patient of the Middlesex Hospital, where he remained for five months, during which time abscesses formed about the hip, which were opened. He was discharged unrelieved, and was under treatment at a dispensary for some months. After this he was admitted into the Westminster Hospital, under Mr. B. Holt, and remained under treatment for some considerable time, but without either improvement of his general health or relief so far as regarded the disease in the hip. With a view to effecting such a change in his health as would enable him to undergo an operation, he was sent to Margate for six weeks, where he somewhat improved, and the hip affection assumed a less active character; and he was readmitted into the hospital on the 4th of September, as above stated.

On admission he was extremely pale, emaciated, and the countenance indicative of severe suffering; pulse small, quick, and irritable; secretions unhealthy; appetite bad and capricious. The left limb was adducted, the thigh flexed on the pelvis, and the leg upon the thigh. There was considerable tilting upwards of the pelvis, and the limb was shortened to the extent of three inches. There were several sinuses over and around the trochanter and in the groin, which gave exit to a profuse discharge of pus, and led down to carious bone. He suffered considerable pain, and got but little rest at night. He was ordered nutritious diet, with three ounces of wine daily; and desired to take an anodyne draught every night, with cinchona mixture during the day. A lotion of the permanganate of potass for the hip (one drachm to a pint of water). This treatment was pursued up to Oct. 22nd, when, the general health being improved, and the active disease in the hip having become less severe, Mr. Holt determined to excise the head of the femur.

Oct. 22nd.—The patient being placed under the influence of chloroform, a T-shaped incision was made through the sinuses over the great trochanter, down to the bone, and the flaps were reflected, when it was found that the head of the femur was so strongly attached to the ilium, partly by bone and partly by fibrous tissue, as to prevent its removal entire. The acetabulum was found to be in a carious state, and the whole of the bottom of that cavity was scooped out, allowing the fingers to enter the pelvis through the opening. The limb was extended and placed on an interrupted long splint. There was considerable hæmorrhage during the operation, and many who were present expected the little fellow to die on the table. He was placed in bed, and some hot wine-and-water administered to him. He was placed on a diet consisting of strong beef-tea, with eggs and wine, as much as he could take, and ordered a composing draught.

23rd.—Had a restless night; extremely low, pale, and exsanguined; pulse 60, very feeble; takes a little beef-tea, wine, and egg.

26th.—Much better; the wounds suppurating healthily; sleeps better, and is free from pain.

30th.—Very much better; appetite improving daily, and he is able to eat a little meat.

Nov. 6th.—Improving steadily; discharge from the wound much decreased in quantity.

Dec. 18th.—He is now able to move about with the aid of crutches. His health and strength improve daily; there are three openings, discharging a small quantity of healthy pus.

Jan. 20th, 1862.—He has steadily improved up to this time, and is able to go out of doors on his crutches; there is still some slight discharge from two sinuses, but no pain. The limb that was operated on is, as he stands up, about three inches shorter than the other, owing to the obliquity of the pelvis; but by measurement it is somewhat less than two inches shorter. He has the power of moving the limb in every direction, and with the aid of a high-heeled shoe will have, as soon as his strength allows him to put away his crutches, a very useful limb, which will enable him to walk freely, and with little lameness.

II.—CARIES OF THE HIP JOINT; EXCISION OF THE HEAD OF THE FEMUR AND PART OF THE ACETABULUM; GOOD RECOVERY.

Harry P——, aged eight years, a thin emaciated boy, was admitted Sept. 16th, 1861, suffering from disease of the left hip-joint. His mother stated that about two years previously he had a fall on his side, which caused him for a few days to walk lame, but from which, in the course of a week, he apparently recovered. Soon afterwards, however, he was observed to limp while walking, and he complained of pain in the left hip-joint and knee, but more particularly in the latter; and the limb appeared shortened. He was taken to St. George's Hospital, where he was under treatment for two months, without manifest improvement.

Upon admission he was exceedingly emaciated; his countenance pale and cachectic; pulse quick and feeble; tongue foul; bowels irregular and secretions unhealthy; appetite indifferent and capricious. He had likewise a troublesome cough and night-sweats. There was considerable flattening of the left nates. Three sinuses existed over the hip joint, leading to carious bone, from which there was a constant discharge of pus. There was much angularity of the pelvis; the thigh was flexed on the abdomen and the leg upon the thigh, the limb being adducted, and the knee embedded on the opposite thigh. Any movement of the limb caused him great pain, both at the hip and at the knee. He was placed in bed, and as nutritious a diet as he could take, with three ounces of wine daily, were administered. Poppy fomentations were applied to the hip, and he was ordered to take henbane with carbonate and acetate of ammonia three times a day. Under this treatment his health somewhat improved, and the soft parts in the vicinity of the carious and necrosed bone became less inflamed.

Mr. Holt determined on enlarging the existing openings and removing the carious head of the femur, as well as any other parts affected. The boy having been carefully placed under the influence of chloroform on October 1st, an incision was made through the sinuses over the great trochanter down to the bone; and, having detached the connecting tissues, Mr. Holt was enabled, by rotating the limb inwards, to disengage the head of the femur from the cotyloid cavity, and to remove it by the aid of a saw. The acetabulum was now examined, and the whole of that portion which was found to be carious was removed. The limb, being now perfectly under command, was extended and placed on an uninterrupted splint, and water-dressing applied to the wound. Notwithstanding the magnitude of the operation, comparatively little blood was lost; and the depression produced by the proceeding was soon recovered from after the administration of hot wine-and-water.

October 2nd.—He had some sleep during the night, and, although very low, says he is comfortable. He is able to take a fair quantity of strong beef-tea, and three ounces of wine daily.

4th.—Improving in every respect. The wound having suppurated freely, the dressings were removed for the first time since the operation; there is a free discharge of healthy pus from the wound, and the parts around look healthy; appetite improving. The limb is in good position.

6th.—Discharge from the wound rather offensive, and the skin around looks red. To have a poultice applied, and a solution of nitrate of silver to the surrounding skin.

12th.—Very much improved; the limb is in a good position, and the wounds look healthy and are granulating; appetite much improved. To take middle diet and half a pint of porter daily.

Nov. 2nd.—Continues to improve; the wound is nearly healed; the limb is in a perfectly straight position, and he is free from pain.

30th.—His strength has so much improved (all the sores about the hip being entirely healed) that he was allowed a pair of crutches, which enable him to move about pretty freely.

Dec. 10th.—Very much improved in health and strength. He can move the limb freely in every direction, and bear on it without pain. The limb is shortened to the extent of two inches and a half. He has had a high-heeled shoe made, with which, and the aid of one crutch, he walked out of the hospital to-day to go into the country.

III.—HIP-DISEASE; DISLOCATION OF HEAD OF BONE ON TO THE DORSUM ILII; EXCISION; SATISFACTORY PROGRESS.

Catherine Louisa H——, aged eight years, was admitted into Holland ward on the 4th of February, 1862, with abscesses about the right hip, the result of disease of the hip-joint. Three years ago the child had a fall upon some stone steps, which gave rise to pain about the hip and haunches, for which she was under medical treatment for some time; and eighteen months ago she was admitted under Mr. Holt's care with an abscess on the right hip-joint. This was opened at the time, and, under proper treatment, the child's health improved and the abscess healed, re-opening again, however, after she had left the hospital.

On admission there were several sinuses about the right buttock, through which carious bone could be felt, and which kept up a constant discharge. The head of the femur was evidently dislocated upon, and apparently fixed to, the dorsum ilii; and the limb was strongly flexed upon the pelvis. A compensatory curve in the spine had been established. The child's health had suffered from the suppuration and irritation, and she was pale and feeble.

Feb. 12th.—The patient was ordered a drachm of steel wine three times a day. There being a good deal of inflammatory redness about the skin in the neighbourhood of the part, a lotion of nitrate of silver was applied with good results, and the child's health gradually improved.

April 15th.—The child having been placed under the influence of chloroform, Mr. Holt laid open the sinuses, and carried an incision down to the head of the femur, which was found to be dislocated and in a carious condition. The saw was applied below the trochanter and the bone divided, and the adhesions formed between the head and the pelvis having been severed, the diseased portion was removed. With the gouge some carious spots of bone in the pelvis were removed; and the limb was then straightened and brought to nearly the same length as the other, being confined by an interrupted long splint and perineal bandage in the usual way.

After the operation the child made the most satisfactory progress, healthy action being rapidly established in the wound, and the pain previously complained of being entirely relieved.

May 13th (some weeks after the operation).—The greater part of the wound is healed, and the discharge but trifling. The limb is but slightly shorter than that on the sound side, and the child's health has materially improved since the operation.

IV.—OLD HIP DISEASE, WITH CONTRACTION OF THE THIGH UPON THE PELVIS, IN A CHILD; FORCIBLE EXTENSION UNDER CHLOROFORM.

Bridget M——, aged six years and three quarters, was admitted into Holland ward, under Mr. Holt, 7th April, 1862, with contraction of left femur, the result of old hip disease. Three and a half years ago she had acute inflammation of the left hip-joint, which gave rise to abscesses on the outer side of the limb; but these were healed up two years ago, since which time the thigh has been forcibly flexed upon the abdomen, and the child has only been able to get about with a crutch.

April 16th.—The child having been placed under chloroform, Mr. Holt proceeded to extend the limb forcibly, the pelvis being firmly held by an assistant. The adhesions were evidently of a fibrous character, and yielded to the force applied, with a slight cracking sound. The limb was fully extended, but could not be brought to quite the same length as the opposite one, on account of the curvature of the spine, consequent upon the distortion. The skin in the groin was softened and tender, owing to the long-continued application of the two surfaces. A long splint was applied before the patient left the theatre, to prevent recontraction of the limb.

Two days subsequently the splint was removed, and a weight was attached to the foot, with strips of plaster applied up the side of the limb, which mode possesses the great advantage of not exercising injurious pressure on the foot. The weight being allowed to hang over the end of the bed, kept up extension, whilst counter-extension was provided for by the use of a perineal bandage passed through the groin of the sound side, and attached to the head of the bed. Ordered syrup of iodide of iron, half a drachm; water half a drachm: three times a day.

May 13th (one month after the operation).—The limb is perfectly straight, and there is some degree of motion in the joint, which is increasing under the use of passive exercise. The spinal curvature is much diminished, and the child is well and strong.

KING'S COLLEGE HOSPITAL.

DISEASE OF THE HIP-JOINT; ABSORPTION OF THE HEAD OF THE FEMUR; ACETABULUM MUCH INVOLVED; REMOVAL OF CARIOUS FRAGMENTS; RECOVERY.

(Under the care of Mr. FERGUSSON.)

A PECULIARITY of the following case was the almost entire absence of suffering throughout the long period during which the disease progressed. At the operation, the head of the

thigh-bone was found to be absorbed, and the acetabulum most extensively disorganized—so much so, indeed, that, on the removal of all the affected part, the wound, as in Mr. Holt's first case, communicated with the cavity of the pelvis. This, although a grave matter, did not produce any serious symptoms; the healing went on, but slowly, and the boy left the hospital ten weeks after the operation.

The notes of the case were kindly furnished by Mr. G. Fortescue, late house-surgeon to the hospital.

W. B——, aged thirteen, a native of Preston; a pale, delicate, strumous-looking youth; admitted October 4th, 1861. About seven years ago it was observed by his parents that the patient walked lame, and after a time he himself found that his right leg became easily tired. Four years ago a swelling appeared on the upper part of the right thigh in front, which burst, and has continued to discharge pus ever since. Soon the leg became shorter. He has undergone a variety of medical treatment, with little or no benefit.

On admission, the right thigh was found to be much wasted, and the pelvis "tilted" on the diseased side. The thigh was in advance of the opposite one, and when standing the limb was everted, the foot turned outwards, and the heel rested a little above the left inner malleolus. From the anterior superior spinous process of the ilium to the outer condyle on the right side the distance was less by rather more than an inch than on the other. There was considerable swelling about the hip-joint, and a series of sinuses existed along the crest of the os innominatum. There was no pain in the knee, nor has there ever been any; scarcely any tenderness on pressure over the trochanter. Very little independent movement of the hip-joint remained. Passive motion caused very slight pain, and indeed an almost complete absence of suffering has been throughout a prominent feature of this case. On examination, dead bone was readily detected through one of the larger sinuses.

Oct. 19th.—The patient having been put under the influence of chloroform, Mr. Fergusson made a crucial incision over the trochanter major, and examined the condition of the parts. The head of the femur was found to be absorbed, and the acetabulum extensively diseased. In the latter locality the gouge was freely used, and a very deep wound resulted, which apparently communicated with the interior of the pelvis. The cavity was filled up from the bottom with dry lint, and a strip of lint passed through the incision above was brought out as a seton through the other opening below the trochanter.

21st.—The boy is without pain, and appears to suffer very little from the operation.

Nov. 4th.—Continues to improve; eats and sleeps very fairly. There is a free discharge from the wound, which looks rather sluggish. The wounds are syringed out daily with a weak solution of Condy's fluid (liq. potass. permanganat.), two drachms to a pint of water, and dressed with a stimulating lotion under a poultice.

11th.—The wound looks more healthy, and is filling up a little. Its edges are drawn together by strapping.

Dec. 27th.—The boy was discharged somewhat improved in condition. The openings, however, refused to heal, and were still discharging.

MIDDLESEX HOSPITAL.

CARIES OF THE PELVIS AND FEMUR; EXCISION OF THE HEAD OF THE FEMUR; RECOVERY; CLINICAL REMARKS.

(Under the care of Mr. NUNN.)

THE patient, a female child, aged twelve years, had been some weeks in the hospital. When admitted, there was a fistulous opening at the right femoral fossa, and a threatening of abscess at the middle third of the thigh. Most of the ordinary symptoms of advanced hip-joint disease were, if not absent, at least obscure. Mr. Nunn ordered the long straight splint to be applied, with apparent benefit for some time; but about ten days since the abscess at the middle third of the thigh became much inflamed, the region over the trochanter major assumed a tense aspect, and the painfulness of the hip prevented the continuance of the application of the long splint. Very soon an opening formed in the middle of the thigh, and permitted the evacuation of much matter of a very fetid nature. Through this opening pus of the same character continued to escape in large quantities. As there was evidently disease either of the pelvis or head of the femur, Mr. Nunn determined to make exploratory incisions; and, in the event of the result of these incisions justifying it, to excise the head of the thigh-bone.

On November 20th, 1861, the patient being placed under the influence of chloroform, Mr. Nunn cut down almost immediately over the upper fifth of the femur, and, detecting through an aperture in the capsular ligament caries in the head of the bone, extended the incision upward, and, by opening the capsule of the joint, easily everted the head, which was removed, with the neck, by the chain-saw; and subsequently, on the advice of Mr. Shaw, the trochanter major was also removed. After the patient was again in her bed the straight splint was reapplied.

Mr. Nunn stated to the class that although he could not hope for a cure, since there evidently existed very considerable disease of the pelvis, yet he felt sure that the operation would afford relief by removing one great cause of the patient's extreme suffering,—namely, the *tension* on the inflamed parts from the anatomical disposition of the structures surrounding the hip-joint.

Nov. 26th.—The progress of this case has been hitherto quite satisfactory. The patient has slept well, and enjoys her food, and has quite a cheerful look. There are some very largely-dilated veins over the hypogastric and inguinal regions, which have an ominous appearance. The relief afforded has been, nevertheless, quite remarkable.

May 17th, 1862.—The immediate result of the removal of the carious head of the femur was, as above stated, a complete relief from pain and distressing constitutional disturbance. Very copious purulent discharges continuing, every nutritious article of food and a very liberal supply of wine were supplied. About six weeks since the patient was placed under the influence of chloroform, and the sinuses remaining were explored. As no carious patches and no sequestra about the pelvis could be detected, the patient was discharged from the hospital.

Accounts from the child's home represent her as eating and sleeping well, and free from suffering. Taking into consideration the extensive disease of the ischium and pubis, the progress of the case may be considered satisfactory. Should the sinuses heal, and the patient continue to gain strength, it is probable that the tendons of the adductor longus will require division in order to improve the position of the limb. This would have been done already had not a sinus coursed exactly over it, and the integument been very much attenuated at the point most advantageous for division of the tendon under ordinary circumstances.

WEST LONDON HOSPITAL.

EXCISION OF THE ELBOW-JOINT FOR SCROFULOUS DISEASE OF TWENTY YEARS' STANDING; RECOVERY.

(Under the care of Mr. ERNEST HART.)

THE results of excision are not in any joint more satisfactory than in that of the elbow. Of 149 recorded cases there were 33 deaths, or a little over 22 per cent. Of 470 amputations of the humerus 157 proved fatal, or in the ratio of about 33 per cent. Thus it will be observed that the results are decidedly in favour of excision of the elbow-joint. The following case adds an additional unit to the favourable statistics which are accumulating in relation to this operation. We are indebted to Mr. Atkins, house-surgeon, for the notes indicating the progress of the case.

A. H——, aged thirty-three, was admitted into the hospital, having been the subject of scrofulous caries of the elbow-joint for nearly twenty years. During this long period he had had repeated attacks of inflammation in the joint. Pieces of bone had at various times been removed. On admission, the arm was anchylosed in the bent position. There were one or two apertures connected with small sinuses, and the patient complained of much nocturnal pain. The arm was useless to him in his occupation. Mr. Hart proceeded to excise the diseased joint and ends of the bones on March 12th, employing the single posterior incision. On laying open the joint, the dislocated and anchylosed process of the ulna projected most prominently; Mr. Hart therefore removed this first, then sliced away the articular ends of the humerus, and cut through the head of the radius. It was necessary to remove a greater extent of bone than usual, because, owing to the number of years that dislocation and consequent shortening had continued, corresponding retraction of the soft parts existed; so that it was

necessary to make allowance for the overlapping of the bones, and to remove enough to leave a small space between the sawn ends, which would ultimately admit of flexion of the arm after time had been allowed for fibrous tissue to be developed between them. The precaution was observed, however, of not opening the medullary canals; for experience has shown that when serious accidents have followed excisions, they have often been traceable to that circumstance. Silver sutures were used in approximating the wound, and it was bound up with strips of wet lint. Heath's splint was applied at the time, but the pads were not buckled tightly. The advantage of applying the splint at once seems to be that the arm can be thus shifted when necessary without movement at the joint and pain to the patient. On the other hand, if the pads are strapped tightly for the first day or two after the operation, troublesome swelling is apt to ensue at the joint and in the forearm. To prevent the œdema and painful engorgement of the hand which sometimes occur, the limb was fixed on a slightly-inclined plane. The case has progressed extremely well, and the patient has a very useful arm, with good movement at the elbow.

LONDON HOSPITAL.

NOTE ON THE CASE OF RECENT VESICO-VAGINAL FISTULA AND STRICTURE OF THE URETHRA.

(Under the care of Mr. MAUNDER.)

THIS case was recorded last week, but we are desirous of mentioning that the patient was examined on the 15th inst., and the cure of the fistula was found to be permanent, the bladder having completely recovered its power of retention of urine. This has very much relieved the tendency to the urethral stricture, which is an interesting fact in the history of the progress of this case.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

TUESDAY, MAY 13TH.

DR. BABINGTON, PRESIDENT, IN THE CHAIR.

ON JAUNDICE: ITS PATHOLOGY AND TREATMENT.

BY GEORGE HARLEY, M.D.,

PROFESSOR IN UNIVERSITY COLLEGE, LONDON.

IT is universally admitted that the facility of the diagnosis of jaundice is only equalled by the obscurity of its pathology and the uncertainty of its treatment. In this communication, therefore, the author set about unravelling the nature of the various morbid conditions which give rise to it; and pointed out how, notwithstanding the seeming discord, they could all appropriately come under the two common heads of "jaundice from suppression of the biliary function," and "jaundice from the reabsorption of the secreted but retained bile." Moreover, Dr. Harley showed that the pathology of jaundice resulting from suppression is totally different from that arising from obstruction; and, consequently, that a line of treatment which would be appropriate and beneficial in the one form, would be detrimental, if not actually hazardous, in the other. Fortunately, however, the author pointed out a new method of distinguishing the two forms of the disease when all the ordinary means of symptomatic and physical diagnosis prove unavailing. The method consists in analyzing the urine, which, he finds, contains different morbid products according to the particular form of the disease. Thus, for example, in jaundice from suppression the urine contains only those biliary ingredients which exist preformed in the blood. In jaundice from obstruction, on the other hand, the urine contains, in addition to these, the materials generated in the liver itself, and which have been reabsorbed into the circulation from the distended gall-bladder and ducts. A simple mode of distinguishing the two conditions is, to add to about two drachms of urine half a drachm of strong sulphuric acid, and a fragment of loaf-sugar the size of a pea. If at the time of contact of the two liquids a scarlet or purple colour is produced, it proves that the acids of the bile are present, and the case may consequently be put down as one of jaundice from obstruction. On the other hand, if no bile-acid reaction, but merely a browning of the sugar, be observed, the case is in all probability one of suppression. Dr. Harley pointed out, however, that care must be taken not to confound the two cases; as jaundice from obstruction, especially the severe form, often merges into jaundice from suppression.

The author also confirmed Frerichs' statement regarding the presence of tyrosine and leucine in the urine of acute atrophy of the liver; and further stated that he had also found these substances in the urine of chronic atrophy, so that their presence might aid in the diagnosis of the latter as well as of the former condition of the hepatic organ. Several cases were cited illustrating the value of the different methods of diagnosis; and the author concluded by pointing out the class of cases in which mercury and other remedies were likely to be beneficial, and where they were likely to do injury. He specially recommended the employment of benzoic acid in jaundice from suppression, and inspissated bile in that arising from obstruction, in which latter class the patient frequently dies from slow starvation, in consequence of the absence of bile in the digestive process causing imperfect assimilation of the food to take place. Dr. Harley also called special attention to the fact that bile, as now employed, more frequently does harm than good; for, when given along with the food, instead of aiding the digestive process, it actually retards it by interfering with the action of the gastric juice. If, on the other hand, bile be administered, as the author proposes, at the end of stomachal digestion, it acts (as in the healthy organism) on the chyme, and renders it fit for absorption. In order still further to insure this desirable object, Dr. Harley has had bile specially prepared and put up into capsules, which are not readily acted on by the gastric juice, but which, on being dissolved in the duodenum, allow the bile to come in contact with the food at the proper moment, and thereby enable the physician to imitate nature, and supply an important element to the system.

The communication was well illustrated with preparations and drawings.

DR. EDWARD SMITH, after dwelling upon the great interest of the paper, referred to two subjects explained in it which had struck him—the importance of determining the amount of urea evolved, and the alleged mode of action of acids and alkalies. In the case referred to there had been a large ingestion of nitrogenized food, and yet the amount of urea had diminished from about 450 grains per day, which at fifty years of age would be about the standard quantity, to between 300 and 400 grains—a fact which proved clearly that a large portion of the nitrogenized food had not entered the blood, but had passed off by the bowel. He thought the determination of the amount of urea in cases of defective assimilation was of the utmost value; but since there were normally great variations in the daily elimination of urea, it was essential that experiments should be extended over several days successively; and it would be more satisfactory to determine at the same time the quantity of nitrogen eliminated by the bowel. He considered that the explanation of the mode of action of acids and alkalies was most ingenious, but he doubted as to its validity. It might be, as suggested by the author, that an alkali being given excited the formation of gastric acids, which then passed into the bowel and interfered with the alkalinity of the biliary and pancreatic juices, and thus prejudiced the digestion of fats; but, if so, the smaller the quantity of alkali administered, the less amount of acid secretions would be induced. Without admitting or denying the explanation, he must affirm that alkalies were very serviceable in numerous cases of jaundice.

DR. CHAMBERS said the author had referred to jaundice caused by pneumonia and the zymotic fevers, but had not explained how it occurred. He wished to ask the author if in these cases he had examined the blood, and if so, in what state and form the colouring matter was found. In pneumonia there is colouring matter in the fæces and urine, and also in the skin, and the serum of the patient's blood is dark. In these cases there is no obstruction of the bile-ducts. It was said by some that jaundice occurred in those cases of pneumonia in which the right lung was affected; but he (Dr. Chambers) had found it in cases of pneumonia on the left side. Again, in zymotic fevers there was no local action. Cases of this kind had an important bearing on the explanation of jaundice.

DR. MARCET said the examination of the fæces would often clear up difficulties in the diagnosis of the cause of jaundice. If the bile is retained, there is in the fæces an abnormal quantity of fat, and hence the fæces are white, and by alcohol much fat may be extracted. There was not, however, enough to be recognised by the eye. The fatty matter does not exist as neutral fat, but as fatty acids. This passage of fatty matter showed that it was not the pancreas alone which had to do with the digestion of fats. In reference to the method of administering bile by the stomach in cases of jaundice, he (Dr.

Marcet) thought there would be considerable danger of inducing vomiting.

Dr. EDWARD SMITH asked Dr. Marcet if he thought that, in cases of phthisis in which, large quantities of cod-liver oil being given, there was fatty matter in the stools, this was due to deficiency of bile?

Dr. MARCET said he should infer that the oil was in excess rather than that the bile was deficient.

Dr. HARLEY remarked that he was much gratified by the interest shown in the paper by the members of the Society, and glad to find their views so much in accordance with his own. The analysis of the urea had been made for the precise purpose Dr. Smith mentioned, and in the case in question had afforded most important information, not only as regards the diagnosis, but also in relation to the treatment. In reply to the remarks of the President and Dr. Chambers, he said he thought that the pathology of cases of jaundice accompanying pneumonia came under the head of jaundice from suppression, and more particularly that kind arising from passive congestion of the liver. It had been shown in the communication, for example, that jaundice is a common accompaniment of any cause obstructing the passage of blood through the lungs, capable of producing a sufficient amount of hepatic congestion to derange the secretion of bile. In reply to Dr. Marcet's remarks regarding the action of bile on the fatty acids of the chyme, Dr. Harley stated that he had pointed out that action in an article, "On Digestion," published in the *Medico-Chirurgical Review*, either two or three years ago, and that he considered the presence of a large quantity of fat in the stools a most important diagnostic sign in jaundice, as it indicated that the pancreatic as well as the bile duct was occluded; and, moreover, pointed to the probable seat of the obstruction, which, in the great majority of such cases, would be found at the head of the pancreas itself. After some further remarks, the author, at the request of the President, described the preparation placed on the table to illustrate the communication.

OBSTETRICAL SOCIETY OF LONDON.

MAY 7TH, 1862.

DR. TYLER SMITH, PRESIDENT, IN THE CHAIR.

PRACTICAL INQUIRY INTO THE PROPERTIES OF NITRATE OF SILVER; WITH A DESCRIPTION OF A NEW INSTRUMENT FOR ITS USE IN UTERINE DISEASES.

BY ROBERT ELLIS, ESQ., M.R.C.S.,
OBSTETRIC SURGEON TO THE CHELSEA AND BELGRAVE DISPENSARY.

THE object of this paper was—1st, to prove that nitrate of silver is of the nature of a proper escharotic; 2nd, to define its physiological action as such; and, 3rd, to draw the attention of obstetrists to the value of the instrument with perforated caustic invented by the author nearly ten years since.

In reference to the first point, the most opposite opinions are held by different writers: some maintaining that this substance is not an escharotic, but possesses simply stimulant and astringent properties; while others assert that it is really capable of destroying structure and vitality in the living body, and of producing a slough. The author is of the latter opinion, and considers that, to use the words of Liebig, "when nitrate of silver is applied to skin or muscular fibre it combines with them to form compounds so stable that they cannot be decomposed by other powerful chemical agents. Parts of the body united to salts of silver no longer belong to the living organism, and the neighbouring living structures throw them off in the form of an eschar." In practice, and especially in obstetric practice, having regard to the soft and delicate structures to which lunar caustic is applied, the writer conceives it to be very important to have this point properly defined; and regrets the error of comparing this escharotic with other substances simply stimulant or vesicant in their action.

The physiological action of nitrate of silver as an escharotic may be thus defined: that it destroys life and structure to the depth of its penetrative power, but that its power of penetration is extremely limited. This may be illustrated by the experiment of dropping fluid albumen into a strong solution of nitrate of silver. The albumen instantly combining with the silver forms a dense, white, semi-solid substance; but on section it is seen that the penetration of the caustic has been very limited, the centre of the mass being unaffected by it. The same phenomenon occurs whenever lunar caustic is employed in surgery—a limited depth of structure only is killed. To this fact, and to the abundant presence of the chlorides in the structures of the living body, are we to look for an explanation of the apparently feeble escharotic action of this substance. The existence of the chlorides limits the action of the silver salt by the chemical affinity they possess for it. The peculiar structures of the os and cervix uteri afford a very large surface to the action of lunar caustic, and it is well ascertained that a considerable eschar may be thrown off by them, if this substance be very firmly applied and pressed down into the soft tissues around.

In order to determine this question, a variety of experiments were made on the web of the frog, and the action of the caustic watched under the microscope. The most conclusive evidence was obtained that a death and destruction of tissue followed the use of nitrate of silver (as a minute crystal placed on the web), the eschar dropping out of the web at the end of from seventy to eighty hours, and leaving a clean round hole in it. No such result followed the application of a minute portion of cantharidine.

The third division of this paper had reference to the various forms of nitrate of silver for surgical use, and especially to those introduced by the author some years ago. The varieties of "tough nitrate of silver" were described, and specimens exhibited. The methods of conferring this cohesive property on fused nitrate of silver were described to be—1st, the addition of a little chloride of silver; 2nd, that of nitrate of lead; 3rd, of nitrate of potash. The writer had long ago suggested the admixture of a few fibres of asbestos as another valuable method of attaining this object. Without any exception, the forms of tough nitrate of silver failed to justify their claim to this denomination after being once or twice used. The substance then becomes penetrated by moisture, and its cohesive properties are thereby reduced at once to that of the ordinary fused lunar caustic. With the author's instrument and perforated caustic, the breaking of the latter was no longer possible. This instrument was first shown by the author at a meeting of the Western Medical Society more than eight years ago. The instrument was very simple, consisting of a short socket for the caustic, down which a platinum pin (passing through the caustic) was held and retained firmly by a small nut. It was thus impossible to break off the stick of nitrate of silver, or to leave it behind to produce misery and excoriation to the patient. The handle was a large porcupine quill, the smoothness and elasticity of which constituted it one of the most admirable materials for this purpose. The cover was perforated at the end, by which contrivance the caustic was always kept dry and clean, its moisture evaporating through the aperture. The perforated caustic was used by the writer in the form of cylinders and also of bullets. The latter form was most useful in patulous conditions of the cervix. The simple method by which the central perforation was cast when the caustic was made was then shown in the moulds constructed by the writer. The economy of this invention was proved by the fact that it admitted of the caustic being used up to the last fragment. The security with which this instrument can be used, and the facility with which the cervical canal can be cauterized by it to its highest point, constituted its most valuable features as applied to obstetric purposes.

At the close of this paper, Mr. Robert Ellis exhibited specimens of his instrument, with the caustic secured to it. There were also shown the moulds in which the cylinders and bullets were cast, together with some pure specimens of perforated caustic prepared by Mr. Squire.

JUNIOR MEDICAL SOCIETY OF LONDON.—At a meeting held at the Whittington Club on the 20th inst., S. G. Freeman, Esq., V.P., (St. George's Hospital,) in the chair, the following pathological specimens were exhibited:—"Syphilitic Ulceration of the Larynx," by Mr. W. Fairlie Clarke, (King's College). The patient had died partly from asphyxia and partly from syncope; tracheotomy was performed.—"Laryngismus Stridulus," in a child, by Mr. Pick (St. George's).—"Embolism of the Cerebral Arteries," by Mr. Haward (St. George's); fibrinous blocks were also found in the liver and kidneys. The same gentleman showed a specimen of "Embolism of the Femoral Artery," from a man aged fifty-six, who was struck down while walking in the ward.—"The Lungs of a patient who died of Pyæmia," by Mr. Deck (St. Thomas's). There were abscesses in the lungs and liver.

Mr. Pick (St. George's) read a paper on "Bloodletting," considering the subject under four headings: the effects of loss of blood generally; the *modus operandi* of bloodletting; bleeding, local and general, in inflammation; and the causes which have led to the almost total disuse of this remedy. A lengthy discussion ensued. The meeting then adjourned to June 17th.

THE LANCET.

LONDON: SATURDAY, MAY 24, 1862.

THE General Council of Medical Education and Registration held their first meeting of the present session on Wednesday, the 14th instant.

It would appear that the British Pharmacopœia is at length likely to be published. The report of the Pharmacopœia Committee, which is most elaborate and satisfactory, will be found in the Minutes of the proceedings of the Council. Whatever delays may have occurred, they will be fully compensated by the completeness of the work which the committee are about to issue. That the new Pharmacopœia will be a text-book and a guide for all British practitioners for the future is evident. Difficulties, no doubt, will be experienced in carrying out its wholesome regulations; but these difficulties are slight when placed in comparison with the benefits which must accrue from the uniformity in prescribing and consequent dispensing which must result from the general use of a national Pharmacopœia. The Council have taken steps to obtain an Act of Parliament to give them powers to carry out the objects contemplated by the Pharmacopœia Committee.

At the close of the first day's proceedings of the Council a motion was made and seconded "that reporters should be admitted to the meetings." Though this important resolution was negatived, the time must come when the meetings of the Council will be open to the public press. The Council is a representative body, and they cannot expect in these days to be exempt from that judicious control which the press honestly exerts on all public assemblages. Sixteen thousand medical practitioners have a right to demand that the meetings of those who represent them should not be held in secret, and to object to the practice of publishing only such reports as the Council choose to give.

The following resolution was then adopted:—

"That it be referred to a committee to consider and report whether any and what steps should be taken to remove from the Medical Register the names of persons who may 'have been guilty of infamous conduct in any professional respect.'"

The Medical Acts Amendment Committee have agreed upon a most important amendment of Clause 40 of the Medical Act. Should this amendment eventually be embodied in the Act of Parliament, it would be a sufficient check upon the assumption of medical titles by unqualified medical practitioners and quacks. Some other amendments will also no doubt be embodied in some future legislative measure.

A Mr. HUGHES has addressed a memorial to the Council respecting an old bye-law of the College of Physicians in Ireland, consisting of a declaration which Mr. HUGHES appeared to think would prevent the practice of homœopathy by members of that College. As, however, it turns out that no such bye-law at present exists, the Council of course declined to interfere.

The Council have determined, and we think wisely, not to institute any prosecution against persons who have been convicted of felony or other crime; they properly consider their functions as judicial, and not those of public prosecutors. Such cases will therefore have to be taken up by persons unconnected with the Council, for which the Act of Parliament affords ample provision.

Some important resolutions were carried with respect to the number and names of the candidates who had passed their final examinations, and the number of those who had been rejected, as also with reference to whether any steps had been taken to ascertain the attendance of students previous to granting them certificates. It would appear that the regulations lately issued by the College of Surgeons of England respecting the qualification of candidates for their licence were regarded by many members of the Council as opposed to their recommendations. It will be seen, on referring to the Report, that several motions and amendments on this subject were introduced. Nothing, we think, could be clearer than the resolution moved by Dr. THOMSON and seconded by Dr. SHARPEY. The amendment was carried by only the casting vote of the President, himself a member of the very Board whose acts were impugned by the motion! Were the meetings of the Council open to the public press, the arguments for and against the motions would have appeared in our columns. No fact could more forcibly show the absolute necessity for the admission of reporters to the meetings of the Council. In the absence of any report beyond the mere result, we are left in a state of perplexity and doubt as to the reasons which caused so close a division. Nothing can be more unsatisfactory. The regulations of the College of Surgeons are either in accordance with the recommendations of the Medical Council or they are not. Surely it is due to the profession that they should be enlightened on this point, more particularly as three of the gentlemen whose conduct was called in question voted in the bare majority. Looking at the names forming the minority, we think that the members of the Council of the College of Surgeons would have acted wisely by declining to vote. As it is, the result gives rise to very unpleasant reflections.

An effort was made to pass a resolution urging on the College of Physicians of England not to offer a diploma to any person who did not give evidence of his qualifications to practise surgery. The resolution, however, was negatived, as was also an amendment to the effect

"That the Council are fully satisfied by the statement of Dr. Barrows that the College of Physicians are taking proper steps for ascertaining that their licentiates are qualified to exercise all the powers of practice conferred upon them."

As we are not made acquainted with the nature of the statement put forth by Dr. BURROWS to the Council, we can form no opinion as to the grounds on which the amendment was negatived; but as members of the College of Physicians have an undoubted right to practise surgery, it certainly does seem somewhat remarkable that two resolutions of such grave importance on the subject of education should have been rejected. Here, again, the total ignorance in which we are left with respect to the discussion which ensued upon these motions, demonstrates the absolute necessity of the presence of reporters at the meetings of the Council. It is to be regretted that the insertion in the minutes of the names of the majority and minority was not demanded by some member of the Council.

The Gloucestershire Medical and Surgical Association, which has on several occasions rendered good service to the cause of

medical reform, has forwarded to the Council a memorial containing some very sensible suggestions respecting amendments of Clauses 15 and 40 of the Medical Act. These amendments will necessarily be duly considered by the Executive Committee.

Communications from three of our colonies in reference to the operation of the Medical Act in their several localities were referred to a Committee appointed for the purpose of taking them into consideration. It is highly desirable that the rights and privileges of our colonial brethren under the Act should be clearly defined.

Another attempt was made on Tuesday last to control the action of the College of Surgeons of England respecting their late regulations with regard to medical education. This attempt, however, like those previously made, was frustrated. We are not informed of the numbers who voted for and against the resolutions. If the College of Surgeons of England can really command a majority in the General Council, they will still continue to exercise an "independent power of action," and set the regulations of the Council at defiance.

"THE poor abuses of the time want countenance," said the fat knight whilst planning the Gadshill robbery; and so also the Lord Advocate, drawing his Scotch Lunacy Bill, seems to have thought. One of the most flagrant abuses of recent times has unquestionably been the manner in which pauper lunatics have been treated by the parish officers in Scotland. The feeling which the revelations of the Royal Commission on Lunatics in Scotland so widely excited is too strong to be already forgotten, although five years have elapsed since they were made; and in these fast days one may be permitted to forget much in that space of time. Let those of our readers, however, who may wish to be reminded of what was then thought of the treatment of the insane poor of Scotland turn to the report of the debate in the House of Commons on May 27th, 1857. There they will find that the Lord Advocate himself designated the condition of the insane poor as "a disgrace and a scandal to his country." Mr. ELLICE, who vehemently denounced the cruel neglect to which these miserable lunatics had been subjected, attached the responsibility of it to the Poor-law officials, from the Board of Supervision to those of the parishes. To remedy this disgrace and scandal, an Act was passed, creating a Board of Lunacy with powers to insist upon the proper care and treatment of the insane poor; and two medical practitioners, of acknowledged ability and worth, were appointed the paid commissioners. These gentlemen have done everything which could be done by indefatigable industry, by a large knowledge of the subject, and by the active exercise of humanity, never indiscreet and never cold. Everything which could be done by them they have done to ameliorate the condition of the insane poor placed by law under their guardianship. That they have not more fully succeeded has been owing, not to any shortcomings on their part, but to the obstructive parsimony of those parochial boards to whose conduct the disgrace and scandal of the former treatment of the insane had in great measure been attributed.

But these parochial boards—the parishes, as they are called—have done more than offer inert resistance, since they have for some time been engaged in an active agitation against the commissioners, who, in the diligent discharge of official duties, have pressed the parishes to fulfil their own, and who have at least made the latter feel their power of making any glaring neglect of duty uncomfortably public. "If we can only muzzle these watch-dogs we shall do famously;" so the parishes have agitated against the medical commissioners, and under this pressure the Lord Advocate has introduced his Bill into Parliament, by which he proposes to deprive Dr. BROWNE and Dr. COXE of their commissionerships, and to make them inspectors, under the control of a Board of Commissioners, which is to consist of a chairman and two lawyer-commissioners, all enjoying salaries. The paid chairman, it is said, is to be Mr. FORBES MACKENZIE, who, as he has stopped the malt, will perhaps be liberal with the meal. Unlike the noble chairman of the Lunacy Board in this country, whose thorough disinterestedness gives him such wide and unquestioned influence, this gentleman is to be paid the comfortable salary of £600 a year, for which he will be called upon to preside over a monthly meeting of the Board. The parishes, moreover, offer to pay him, which looks as if they expected that he would make it worth their while to do so. But if they do expect him to play into their hands, we feel assured that they will be disappointed, and that they will find in him an upright administrator, against whom no pert censor will find occasion to exclaim, "The devil a "puritan that he is, or anything else constantly but a time-"pleaser."

But how or by whom the chairman and the lawyers are to be paid is not the point which most interests us. The deprivation of the office of commissioner inflicted upon two eminent medical men, because they are medical men, and have discharged their duties with admirable diligence and ability, and the substitution of paid lawyer-commissioners in the post of honour and of power thus rendered vacant—this, in our opinion, is not only a most undeserved censure upon two meritorious public servants—not only a paltry submission to the interested agitation of the parishes—not only a purchase of popularity at the expense of the most helpless and wretched of our fellow-creatures,—it is, in addition to all this, a deliberate insult to the medical profession.

Dr. BROWNE and Dr. COXE are to be degraded from the office of commissioner that certain legal gentlemen may be exalted in their stead. Will Parliament sanction a wrong like this? Is it for this that our professional brethren have emancipated the insane from dungeons and chains, and rehabilitated them in the human family, so that the horror with which our forefathers regarded a madman was not greater than that which is felt by us when we reflect upon the manner in which our forefathers would have treated him? Is it for this that so many able and learned members of our profession have spent their lives in studying the nature of insanity, and in acquiring the art of treating it—that so many of us have devoted ourselves to promote the welfare of the insane by living with them and learning to know them in a manner which no lawyer has ever attempted? Have we thus spent heart and brain for the lunatic to the end that our best representatives may be rudely thrust from places of honour which they have worthily occupied, and be made to stand and serve at the Board where Mr. MONCREIFF has placed his lawyer-nominees in command?

Far be it from us to nurse any illiberal feeling of professional jealousy. By all means let the Lord Advocate make his lawyer-commissioners. If they should be like the lawyer-com-

missioners we have known, they will be humane and thoughtful men, not at all disposed to dispute the larger and more practical knowledge of insanity possessed by their medical colleagues. What we object to is, that in order to make way for these paid lawyer-commissioners the existing medical commissioners should be displaced, and made to take the subservient position of inspectors; and thus be made to serve at the very Board where now they rule. The only reason put forward for this innovation is that it is inconsistent for the men who do the work of lunacy visitation to report to a Board at which they themselves have seats. But if this argument is valid in Scotland, it bears in full force against the composition of the Lunacy Board in England, the members of which visit and report to themselves, in exactly the same manner as do the members of the existing Scotch Board. We shall only adduce one opinion on the question whether this practice is or is not objectionable; but it is an opinion which will be likely to carry more weight with it than that of the Lord Advocate, be it backed ever so strongly by the wide interest of his parochial clients.

It will be remembered that Dr. HOOD's scheme of Lunacy-Law Reform, which was adopted by Mr. WALPOLE, and earnestly advocated before the Select Committee on Lunatics, was to entrust the visitation of asylums and lunatics to officials, with the selfsame title and duties as those of the Lord Advocate's proposed inspectors. Mr. WALPOLE, it is true, did not go so far as to recommend that the medical commissionerships should be abolished; but Lord SHAFTESBURY quickly enough saw that the power of the whole Commission and the welfare of the lunatic were equally in danger, and he proceeded to express his opinion on the matter to the committee in very unmistakeable terms. We have only space for a brief quotation from his Lordship's evidence,* which, however, will suffice to show how completely he dissented from the opinion that any objection exists to the practice of Visiting Commissioners reporting to a Board of which they are members:—

"The great principle," said Lord Shaftesbury, "of our Commission, and that which has given to it its main value, has been this, that all the duties have been carried on by the same persons; that the persons who visit the asylums, both in the metropolis and in the country, are the persons who carry the results of their investigations and of their reports into effect; that everything is reported by them to the Board; and that those persons who have gone over an asylum, and made those reports, come to the Board, and, being part of the Board, contribute to carry into effect their own decisions and their own observations. And I am certain, from very long experience, that the commissioners, by visiting asylums themselves, and being invested with all the dignity, the power, and influence of the Commission, being also backed by the whole authority of the Board, have ten times as much influence and ten times as much weight as could possibly be given to any body of inspectors merely acting under their directions."

He dwelt upon the point that the authority derived from the office of commissioner was of great value in the visitation of lunatics. "In matters of this kind a great deal more is done by weight of influence than by direct authority." He also declared that between commissioners and inspectors that shifting responsibility would occur which a wise legislator dreads as much as a sea captain detests a shifting cargo. He said—"I think there would be a very great evasion of direct personal responsibility, because the commissioners would throw "a great deal from themselves on the shoulders of the inspectors, and the inspectors would be throwing a great deal "back on the orders of the commissioners." After this there would appear to be little chance that the Lord Advocate's bad imitation of Dr. HOOD's scheme can escape the condemnation of Lord SHAFTESBURY in the Upper House, should it ever get there. Let us hope, however, that the shrewd and able lawyer will allow himself time to reflect before he proceeds, and that he will conclude to leave the parishes to find some more worthy advocate—that is, one more worthy to do their kind of work.

The Scotch members of the House of Commons have almost unanimously expressed themselves against the Lord Advocate's proposal of removing the medical commissioners from the Board. A prolongation of the existing Board for a short period will now be proposed; but we trust that this period will be sufficiently long to do away with any hope the parochial boards might entertain of gaining their ends by renewed agitation. Their present experience may show them that their fancied power stood on a foundation of sand.

* See Report ordered to be printed July 27th, 1859.

THE position of St. Thomas's Hospital seems more embarrassing than ever. In a few weeks, the site and buildings pass absolutely into the hands of the railway company. Unless some arrangement can be made between the hospital and the railway, an interruption, most injurious to the public interest, of the beneficent labours of one of the oldest and largest of the metropolitan charities must ensue. It is the bounden duty of those in whom the power is vested to avert so great a calamity—not to deprive the thousands of poor, struggling and toiling in the midst of all the conditions that invade health, of that refuge, the doors of which have for centuries been ever open to them. Looking to the magnitude of the threatened evil, and the invasion of the rights of the poor, every effort that humanity can dictate should be exerted to avoid the temporary closure of the hospital. That no inevitable necessity exists for shutting the hospital gates is well known. The railway company have taken possession of the minute corner, which is all they require. The rest of the site, which contains the whole of the buildings, is so positive an incumbrance to them that they have advertised it for sale. On the other hand, the hospital on the 26th July will be without a site, without a roof to shelter their patients, and the magnificent endowments which are the inheritance of the poor will be lying waste. These being the conditions, we cannot hesitate to express a conviction, widely prevalent, that a grave responsibility will weigh upon the authorities if terms be not made to preserve the present hospital intact, at least until a new hospital is ready. To have brought things to such a pass that the hospital should be at the mercy of a commercial company—which is constitutionally exempt from the burden of a conscience, being bound to make all things bend to the acquisition of a dividend—is bad enough: to suffer a great metropolitan hospital to be closed without necessity, would be a scandal beyond precedent. No shift, no expedient that can be resorted to, in the way of farming out the present patients, can mitigate the countless evils of closing the hospital. What is wanted is not a place to receive the sufferers now in the wards. A few weeks will dispose of the actual patients. The movement through a London hospital is

rapid. The case is totally different from that of a lunatic asylum, or of any institution devoted to the care of chronic disease. The demand is a refuge ever open to admit the countless accidents and acute diseases that are continually accruing in a crowded labouring community. It is not the case of the actual inmates of the hospital that has to be considered, but that of the future claimants who, day by day, and night by night, will look to St. Thomas's for aid in their affliction. Common sense, humanity, and justice point out that such a refuge to be effectual must be on the old spot, or close to the centre of the industrial population to whom, and not to the governors, the hospital belongs.

It is complained that the railway company now make an exorbitant demand for the lease of the hospital. We cannot go into questions of valuation of property. But surely arbitration, which has once already so befriended the company to the detriment of the hospital, might again be appealed to. An equitable arrangement might yet be arrived at which shall permit the hospital work to proceed without interruption. The proposal that has been mooted of keeping up a small establishment in St. Thomas's-street, capable of receiving a hundred patients, is one altogether inadequate to meet the emergency. An hospital with a hundred beds is utterly insufficient for the urgent wants of the crowded and laborious population of Southwark. A factory catastrophe, or some other accident, may at any moment bring a body of fifty or more maimed fellow-creatures to the hospital gates. A borough hospital must needs be on a large scale. If it be found difficult or impossible—and we see by the actual experience of St. Thomas's that it is neither impossible nor difficult—to maintain without curtailment five hundred beds, there cannot be a pretext for not remodelling the hospital on its present site with three hundred beds at least, with all appliances for receiving out-patients, and to erect an accessory hospital or sanitarium elsewhere.

Medical Annotations.

"Ne quid nimis."

MARRIAGES OF CONSANGUINITY.

THERE are few questions of greater interest than the influence of a succession of family intermarriages on the physical development of the offspring. This is not a question which we pretend to decide here authoritatively or *ex cathedrâ*, but the multiplication of the expressed convictions of generations of medical writers, the natural instincts of civilized and barbarous peoples, the ecclesiastical and temporal legislation of all the nations, testify to an innate detestation of closely consanguineous connexions which is sympathetic with some of the results of scientific investigation in condemning the union of blood-relations by a system of intermarriages. Lately the subject has undergone some further sifting, mainly owing, we think, to the demand for facts which we have more than once made, and recent writers have appeared. One of the most intelligent of these, Dr. Gilbert Child, of Oxford, has enunciated strongly an opinion which has always had some popularity, that the marriages of blood-relations have no tendency *per se* to produce degeneration of race. Dr. Child, however, arrives at these conclusions upon very slender grounds, and bases his belief upon a refutative analysis of Dr. Bemiss' facts as to the frequency of disease within a certain series of cases, and upon an analogy drawn from the present in-and-in breeding of prize animals. The medical profession do not now learn for the first time that the English prize cattle are raised by a system of incestuous reproduction. In this way certain qualities are made transmissible with greater certainty from generation to generation; but the production of artificial breeds of animals with small skeleton, and soft, tender flesh, excellent for the table, is perhaps a circumstance which, regarded from another point of view, affords a strong argument on the other side. No doubt peculiarities of shape are transmissible with positive certainty in this way, and if we wanted to ensure a race of men with webbed fingers, or aquiline nose, we might attain that object by inter-breeding. Many sacrifices may well be made in the breeding of domestic animals for the temporary attainment of the particular uses to which these creatures are put: and although those objects may be gained by securing a direct line of breed, yet if this be too long continued the mark is overshot, and it is stated that even the special object is lost by the universal deterioration which the type undergoes, and there result but weak, sickly, infertile, and short-lived scions. The argument from domestic animals to man is not a new one, and we do not find that, as at present stated, it is in any way conclusive. Dr. Child lays stress only upon the hereditariness of any particular disease which is thus likely to be produced. But this is a wholly different matter. The condition of consanguinity adds nothing in itself to the chances of hereditariness, which will in all unions depend upon the special endowments and diseases of the parents, whether consanguineous or not. The charge which is brought against consanguinity in the married pair is, that it produces, by the fact of the non-renewal of blood, "a special cause of organic degradation, fatal to the organization of the species." Dr. Child has chosen an influential organ of scientific opinion for throwing doubt upon the truth of this grave charge; but as he has added no facts upon which his opinion can logically rest, and has evidently not mastered the greater number of facts upon which the generally-received notions are founded, we would counsel him to consult some of the well-known authors, such as Devay, with whose works he is apparently unacquainted; and meanwhile we take occasion to renew the suggestion, that this inquiry is one to which every medical man has some opportunity of contributing a few facts.

THE EPIDEMIOLOGICAL SOCIETY.

THE recent and much-lamented death of Dr. M'William bereft the Epidemiological Society of one of its most valuable supporters. Dr. M'William was the pivot around which the Society turned. He guided and directed its financial affairs, organized the meetings, and prepared abstracts of the papers. Nominally the honorary secretary, he was practically "the active principle" of the Society. Its objects, although of the highest national and scientific importance, and bearing upon State medicine and preventive hygiene in their greatest national relations, are not of a kind which has hitherto sufficiently interested the large number of individual practitioners, who are rather concerned with the healing than the prophylactic art, and deal in facts rather than generalizations. Hence the Society has always numbered a small though distinguished circle of supporters. The death of so able and enthusiastic an officer must make itself severely felt; but by the appointment of two most able and almost equally enthusiastic epidemiologists to fill the offices of joint secretaries, an earnest is given of the determination to conduct this Society with all the former energy. Dr. Milroy is well known for his public labours in hygiene and epidemiological research; and Mr. Radcliffe has given on many occasions evidence of his zealous affection and ability for epidemiological labours. Under these auspices we may hope that the Society will not suffer in its utility by its untimely loss. An important task which has been recently undertaken by the Council, is the preparation of a Handy-book of Epidemiological Research, showing how to observe and what to observe in epidemic diseases. Recent attempts at organizing general observations in this important class of diseases throughout the country, have demonstrated that a very great number of men are unacquainted with the alphabet of the art of observ-

ing epidemics. Hence any attempts at extended inquiry, whether undertaken by the Government or by this Society, have to a great extent failed from the imperfect information furnished by local medical practitioners. This casts no imputation on the ability or goodwill of those gentlemen, for the observation of epidemic diseases must include a number of primitive facts, and conceive a series of physical relations which do not present themselves to the mind, by an early or natural process of thought. The production of a well-digested hand-book for inquirers has been felt by the Council of the Society to be almost a necessary preliminary to any further attempts at the registration of epidemic diseases, which is becoming every day more important etiologically, and more desirable in the interests of the State.

ZOOLOGICAL RECREATIONS.

THE House of Commons have just indulged themselves in a little fun with the zoological collections of the British Museum. The joke might be thought to be stale, because it has been so often repeated, but the members of the House receive it always with renewed zest. They have had two committees, and a score of debates; the committees have each produced a ponderous Blue-book, of more than usual size and dulness: they have each set forth their conclusions in a series of resolutions, in which they have expressed diametrically opposite convictions, and the House on each occasion rejected the advice of the committees they appointed to advise them. Successive governments have admitted the deplorably crowded state of the rooms, garrets, cellars, and porticoes; they have condoled with the directors, and asked if a very few thousand pounds would be of any use. On Tuesday night the old game was played with unusual spirit and animated fun. Mr. Gladstone set forth that the building was crowded to overflow, that the cellars were filled with rich osteological and other collections, that what was stowed away in the cases could hardly be seen, and that the progress of the scientific departments was wholly arrested for want of room to spread. Mr. Gregory was severe, Mr. Monckton Milnes generously sympathetic. Then Lord Henry Lennox began to be laboriously funny, and the rest followed suit. The point of the joke was, that the whale being a monstrous mammal, requires a large space for display. Mr. Bernal Osborne, with all the freedom of a licensed jester, said that "No doubt Professor Owen was the greatest living zoologist, but was the House aware of Professor Owen's plan? He wanted a hall of 850 feet in length for the reception of whales, and a set of apartments for the elephants." Lord Palmerston said that his honourable friend had objected to provide space for whales: but he would make a compromise with his honourable friend and allow him to exclude whales altogether by a new clause. The upshot of the jesting was that a question of great national importance, which must one day be disposed of, and cannot long be delayed, was again shelved, and the student is debarred from using the magnificent collections which are crowded in the building under the care of so many zealous and distinguished directors.

THE LAW OF INCREASE AND THE STRUCTURE OF MAN.

THIS is one of the novelties of 1862; at least so far as those in England are concerned. The visitors to the Austrian Court of the International Exhibition will see twenty-four statuettes, arranged in a semicircle, representing the human figure in its various stages of growth from birth to the 25th year. Above these hang tables and diagrams of considerable extent and complication, and the whole is described as illustrating the numerical relations of the outward frame and the increase of the human body. It is difficult to convey an idea of the contents of these tables and diagrams, and the talent which they indicate. But we may mention that the author, DR. F. P. Leharzik of Vienna, gives it as the result of many thousand measurements, that the structure of the whole body of man is based on six fundamental dimensions, being portions of its whole length, and which are:—1, the length of the head from its vertex to the apex of the chin; 2, the length of the neck from the apex of the chin to the upper margin of the sternum; 3, the length of the sternum from its upper margin to the end of the xiphoid cartilage; 4, the distance of the xiphoid cartilage to the upper margin of the pubic symphysis, the band dividing this distance into two equal halves; 5, the total length of the thigh and the leg; 6, the vertical elevation of the centre of the internal malleolus to the sole of the foot. As a seventh dimension he takes the clavicle, and with the help of these lines as radii, and by a system of mutually intersecting and tangent circles, he constructs formulæ for fixing mathematically the most important proportions of all the corporeal dimensions, which remain, he says, the same for any age whatever. This increase is regulated by a law of regular epochs, which is stated. We will not quote these stated laws, for sooth to say the "laws" and the "proportions" seem to us alike arbitrary and incorrect, and the whole affair a philosophical plaything; but for a perverse kind of ingenuity, and for the minuteness of its elaboration, this scheme is worth the attention of the curious.

ACCIDENTAL POISONING.

A CASE of accidental poisoning this week in Edinburgh, and another in London, recal attention to this painful subject. In the last case the embrocation was put into an ordinary bottle, and was not even labeled "Poison." This is a serious matter, and although this death be accidental, we cannot absolve the druggists from blame where they omit precautions under such circumstances that the most trifling laxity or incorrectness may lead to serious results. The number of fatal accidents due to the disregard of any mechanical precaution or safeguard is frightful to contemplate. The Pharmaceutical Society some time since appointed a committee to take into consideration the principle of mechanical safeguards which Messrs. Savory and Moore have long and successfully applied in their business, and in the medical departments of the army and the public institutions with which they are connected. When will this committee report? The deaths occurring on all sides ought to act as spurs to fresh activity. We shall be glad to hear that they are not really torpid. The sooner some general rule is presented to the whole body for observance, the better for themselves and their patients. The following is a sketch of the circumstances attending one of the cases above mentioned:—

"Mr. George Corsham, a gentleman well known, it is said, in commercial circles, residing at No. 26, Lower Eaton-street, Belgrave-square, was accidentally poisoned under the following melancholy circumstances. The deceased, being a widower, resided by himself, at the address stated, but being subject to fits, a young woman, named Harold, was engaged to attend upon him. Mr. E. Davies, of Upper Belgrave-place, his medical attendant, sent him some medicine on Thursday night to be taken internally, and also an embrocation; and on Friday morning at seven o'clock deceased declared that he was poisoned, when it was found that Miss Harold had made some mistake in the medicine, and administered the wrong one. Mr. Foote, chemist, promptly attended with the usual remedies, but all was of no avail, as the unfortunate gentleman died in dreadful agony."

A MEDICAL CANDIDATE FOR THE CIVIL PENSION LIST.

No class of men do more for the advancement of general science than the medical profession; yet how rarely are their services in any way acknowledged by the State! Is there at the present time a single member of our profession on the Pension List? We believe not. A memorial is now in course of signature in favour of the claims of Dr. George E. Day, Chandos Professor of Medicine in the University of St. Andrews. Dr. Day's claims to consideration are, we think, in the highest degree worthy. Dr. Day has worked well for his profession and for the public in many ways: he has occupied an important post in one of the oldest Scottish Universities,

and has so conducted himself as to give general satisfaction. By the recent ordinance of the Scotch University Commissioners the number of candidates for the M.D. of St. Andrews will be so far diminished as to reduce the income of Dr. Day to less than one-half of its present amount. He has met with a serious accident, which incapacitates him for practice. He has a wife and family, and a large portion of the small income he has left has been forestalled by insurance premiums. The memorial, which has already been signed by the Chancellor, Principal, and Professors of the University of St. Andrews and the professors of the University of Edinburgh, besides other distinguished persons, sums up the claims of Dr. Day to the pension sought as follows:—

"First, on account of his sudden deprivation of more than one-half of the fairly earned emoluments of his Chair of Medicine, in consequence of an alteration in the rules of Graduation, as they had subsisted during his incumbency and for many years previously.

"Secondly, that by an act of the Privy Council this deprivation has been made more complete than was contemplated by the University Commissioners, inasmuch as it takes away the chance of such compensation as they had specially provided for Dr. Day's case.

"Thirdly, that Dr. Day's literary and professional character would do no discredit, but the contrary, to the patronage of the Crown.

"Fourthly, that his infirmities are such as to make it impossible for him to gain a living, as he otherwise might well do, by the exercise of the medical profession."

We cordially concur in the prayer of the memorial, and trust that the Prime Minister will grant the request of the Commissioners. By so doing, he will render an act of justice and kindness to a distinguished and worthy man, and recognise the rights of a profession which has high and just claims to the consideration of the State.

THE POISON OF THE ADDER.

DR. EDWIN BISHOP, of Moreton Hampstead, Devon, in a letter to *The Times* of Monday last, makes the following suggestion:—

"The remedy for the bite of an adder, and indeed all poisonous snakes, is simple. It has been proved by experiment, over and over again, that poisons of this character are harmless when applied to a mucous surface, and quantities have been swallowed without producing any ill-effect. The bite, nine times out of ten, is in some part of the hand, and immediately it is felt the wounded part should be well sucked by the mouth, and a piece of string tied tight round the finger or the wrist (according to the seat of the bite) to prevent the poison from being absorbed into the system. If this simple plan was generally known and acted upon, death or injury from the bite of an adder would be rare indeed."

In cases of dissecting wounds, and of hydrophobia, this plan might also be adopted, and in many instances would prevent the poison entering the system.

THE GREAT INTERNATIONAL EXHIBITION.

III.

PHARMACEUTICAL PRODUCTS.

IN the general arrangement of objects in the Exhibition, drugs and preparations used in medicine are included in Class 2, which comprises "Chemical Substances and Products, and Pharmaceutical Processes." Taking this class as a whole, the articles exhibited in it are very various, but those of them relating to pharmacy occupy a prominent position on account of their number, their commercial importance, and the scientific interest that attaches to many of them. This department of industry has, perhaps, never been better represented than at this Exhibition. Drugs in their unmanufactured state can hardly be said to belong to this class, and being mostly of foreign production they would not even come, according to the classification adopted, into the British department. There are, however, two or three of the collections in Class 2 in the eastern annex into which drugs have been admitted. Thus, Mr. Howard, the well-known chemical manufacturer of Stratford, in connexion with his extensive collection of chemical products, including quinine and the other alkaloids of the Cinchona barks, of which his firm are the largest manufacturers in this country, has a very interesting and valuable collection of the barks, with botanical drawings of the trees yielding them, and also some of the living plants growing in a Ward's case. This is altogether a collection which could only have been contributed by one who, being well acquainted with the botanical sources of the different varieties of Cinchona bark, possessed at the same time the resources of the manufacturer and the merchant, to enable him to identify and supply specimens of the barks met with in commerce, and their chemical products. It is much to be regretted that a better place could not have been assigned to these barks and the beautiful drawings, from Mr. Howard's work on the Cinchonas, which accompany them. At present they are fixed against the wall in a very inaccessible position.

Another collection in this class, in which there are unmanufactured drugs of foreign production, is that of Messrs. Allen and Hanburys, of Plough-court. In this, as in the previous instance, the association of drugs with pharmaceutical preparations may be justified, Mr. Hanbury having contributed by his publications to the extension of our knowledge of several of these substances, so that his name is to some extent identified with them.

But to a far greater extent than in the preceding instances are drugs exhibited by a committee of the Pharmaceutical Society. The collection which has been formed by this committee, although not yet completed, occupies a much larger space than any other in the same class; and it is intended to comprise all the drugs and preparations used in medicine in this country, contributed by most of the leading pharmaceutists of London and of some parts of the provinces. The great merit of this collection is its completeness. It will show to foreigners and those who take an interest in the subject the existing state of pharmacy in this country, the specimens being for the most part such as are commonly met with in the better class of pharmaceutical establishments, and not specially prepared for exhibition. They are placed on open shelves, under the care of a curator, by whom free access is allowed to them for the purpose of examination. Although the specimens generally are such as are actually used in the treatment of disease, and no attempt is made to give unusual effect by the manner of exhibiting them, yet there are a few remarkable specimens, among which we may notice an unusually large and fine pod of musk, and the root of a sarsaparilla plant of gigantic dimensions, which is suspended over the case, and is more than fifteen feet in length. The different forms of bottle and other contrivances which have been suggested in THE LANCET and elsewhere for preventing accidental poisoning are included in this collection. We understand it was originally intended by the committee to supply, as one feature of the collection, an authentic specimen of every article to be described in the British Pharmacopœia, but the unexpected delay in the publication of the work has entirely frustrated this object.

This collection, although by far the most complete of any of the sort in the Exhibition, is nevertheless not the only one. In the foreign department there are two or three such. There is a collection of drugs and pharmaceutical preparations from the United States, sent by the Philadelphia College of Pharmacy; there is a collection of materia medica from China, and another from Japan; and there is a very interesting and extensive collection of medicines—both drugs and preparations—from Constantinople. We may refer to these more specifically

hereafter, but at present will confine our attention to the British department in the eastern annex.

The different classes of chemical and pharmaceutical manufacture are fairly and well represented here. In the first place, we have the great staple chemical products which find their applications in chemical processes of almost every kind. Among these are oil of vitriol and other mineral acids, carbonate of soda and other alkalies, chloride of lime, alum, prussiates of potash, &c. The specimens of these products exhibited by our manufacturers will bear comparison with those of any other country. Then we have chemical products that have more special applications, such as pigments, and the new dyes derived from coal-tar, of which there are many very beautiful and some most costly specimens. We come in the next place to general chemical products, most of which are used in medicine. Messrs. Howard of Stratford have a large collection of this class of products, including mercurial, antimonial, and ferruginous preparations; salts of the alkalies; and, as already noticed, the alkaloids of the Cinchona barks. Messrs. Davy, Macmurdo, and Co. have a good collection of general chemical products; as also have Messrs. Huskisson, and Messrs. May and Baker. There is a class of chemical manufacturers known as manufacturers of fine chemicals, which is represented here by Messrs. Morson and Son, Macfarlan of Edinburgh, T. and H. Smith, and Hopkin and Williams. Messrs. Morson have very fine samples of the chemical products from opium; tannic and gallic acids; salts of nickel, including sublimed chloride of nickel—the only specimen, we believe, in the Exhibition; and pepsine, both pure and in the state in which it is administered in medicine. Macfarlan has a very large and fine crystallization of codeine, together with other products from opium. Messrs. Smith exhibit opium products, including a large mass of papaverine. Hopkin and Williams have the citrates of iron, cyanide of potassium, iron alum, carbonate of lithia, and other chemicals used in medicine. We should, perhaps, include among these collections that of Mr. Bullock, which contains some scaled citrates of iron, and a very interesting set of products obtained from bile;—also, a set of volatile organic acids and their ethers, by Mr. Barnes. Lastly, there are the manufacturers of pharmaceutical products which are not strictly chemical, such as medicinal extracts and essential oils. Messrs. Savory and Moore have a collection of medicines, some of which have been only recently introduced, and are peculiar to their house. Extracts are exhibited by Mr. Ransom, Mr. Holland, Messrs. Watts, Mr. Hooper, Mr. Squire, Messrs. Allen and Hanburys, and by several exhibitors who have contributed to the collection formed under the auspices of the Pharmaceutical Society. We shall give some account of these and other medicinal preparations exhibited in the British and also in the foreign department on a future occasion.

GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

MINUTES OF MEETING, WEDNESDAY, MAY 14, 1862.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

Mr. GREEN, President, took the Chair at two P.M.

Present—Dr. Burrows, Mr. Arnott, Mr. Cooper, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Storrar, Dr. Alex. Wood, Dr. Andrew Wood, Mr. Watt, Mr. Syme, Dr. Thomson, Dr. A. Smith, Mr. Hargrave, Dr. Leet, Dr. Apjohn, Dr. Corrigan, Sir Charles Hastings, Dr. Sharpey, Mr. Lawrence, Mr. Teale, Dr. Christison, Dr. Stokes.—Dr. Francis Hawkins, Registrar.

The minutes of the last meeting were read and confirmed.

Read the following official notice:—

"Apothecaries' Hall, London, E.C.,
April 19th, 1862.

"SIR,—I am directed by the Master, Wardens, and Society of Apothecaries of the City of London, to acquaint you, for the information of the General Council of Medical Education and Registration of the United Kingdom, that the Society have chosen George Cooper, Esq., of Brentford, as a member of the General Council, in the room of the late John Nussey, Esq., resigned. "I have the honour to be, Sir,

"Your most obedient servant,

"ROBERT B. UPTON,
Clerk to the Society.

"Dr. Hawkins, Registrar of the General Council of Medical Education and Registration."

Mr. Cooper was then introduced to the Council by Mr. Lawrence.

Read the following Report from the Pharmacopœia Committee:—

REPORT OF THE PHARMACOPŒIA COMMITTEE OF THE GENERAL MEDICAL COUNCIL.

The Pharmacopœia Committee, appointed by the General Medical Council, beg to report to the Council that the manuscript of the "British Pharmacopœia" is now completed, and most of it ready for press. Until lately the Committee confidently expected to have on this occasion laid a copy of the whole Pharmacopœia in proof on the Council table. But difficulties of a legal nature, from which the Council alone can relieve them, arose about two months ago, and have prevented them in the meantime from continuing their labours.

The Pharmacopœia Committee was appointed by the Council, in the first session of the Council, towards the end of November, 1858. In conformity with the plan for their proceedings approved by the Council, they associated with themselves members from the three Colleges of Physicians and the Pharmaceutic Society of Great Britain. Sub-committees having been then established at each of the three capitals, they commenced their duties in February, 1859.

It was, in the first instance, resolved that the Pharmacopœia should consist of two parts and an appendix—the First Part to consist of the Materia Medica List; the Second Part, of the Preparations and Compounds, and the appendix, of such articles as are not themselves used in medical practice, but which are employed for the chemical processes and tests of the Pharmacopœia.

I. The Materia Medica List contains every substance, whether obtainable in ordinary trade, or prepared by chemical processes in the Second Part, which the Committee have found, on careful inquiry, to be so far approved in practice as to be entitled to a place in a national Pharmacopœia. Not a few remedies, contained in the Pharmacopœias of the three Colleges of Physicians, have consequently been removed, and many new ones have been adopted. Under each article of the Materia Medica List the Committee have given—1. A Latin pharmaceutic name, by which it will be prescribed, an English synonyme for use in describing the processes in Part Second, and its chemical symbol, if it be a substance of definite constitution. 2. Its definition, together with its botanical reference, if it be a plant, or obtained from a plant, and also a reference to a correct figure of the plant; and in all cases, when possible, a statement of the quarter whence the article is derived. 3. The characters by which it may be distinguished from all other articles in the establishment of the druggist. 4. The tests by which it may be known to be free of known impurities or adulterations. 5. The officinal preparations of which it is an active ingredient.

II. The Second Part, or the Preparations and Compounds, comprises processes for all forms for the administration of medicines, for the extempore prescriptions of practitioners, or for obtaining articles in the Materia Medica List by chemical operations.

The Committee took into consideration the question, whether the transference of the manufacture of many chemicals from the hands of the druggist into those of the manufacturing chemist, might not render it practicable to withdraw a great part of the chemical processes from the Pharmacopœia. But on mature examination it was resolved that they should be retained.

The Appendix needs no explanation.

The Pharmacopœia, thus organized, contains 322 articles of the Materia Medica List, 380 processes, Galenical and chemical, and 49 substances belonging to the Appendix.

In order to settle what articles and processes should be introduced, as well as various other general or preliminary matters, it was soon found necessary to hold a conference of Sub-committees, consisting of three delegates from each.

The conference met in London in May, 1859, and having settled, as far as could be done at the outset, the articles and processes to be admitted, they divided each part into three

equal portions, and assigned the charge of one portion of each part to the three Sub-committees.

The portions undertaken by each Sub-committee, as they were brought to maturity, were submitted to both the other Sub-committees, and after this revision were corrected, where necessary, by that which originally undertook them.

It was found indispensable, however, to hold another conference of Sub-committees last year, in order to adjust many points which could not be settled by correspondence.

This meeting was held in Edinburgh in September last. One important result of the conference on that occasion was, that the whole chemical tests in the Materia Medica List, and the chemical processes in the Second Part, were sub-committed to two of the members, who twice met in Dublin in October and December last, to make the necessary experimental investigations.

The meetings of all kinds which have thus been held for the business of the Pharmacopœia have been the following:—The London Sub-committee has met 149 times; that of Edinburgh, 105 times; that of Dublin, 131 times. The meetings of the two conferences were 10 in number, and the Chemical Sub-committee in Dublin met 18 times.

The Committee are able to state that the whole chemical and Galenical processes of the Pharmacopœia, with the exception of some old-established ones which admit neither of doubt nor improvement, have been subjected to experiment, some of them by more than one Sub-committee.

Important differences between the existing Pharmacopœias of the three Colleges of Physicians rendered it imperative on the Committee to settle several difficult questions, in order to effect a uniform system for the three divisions of the kingdom.

The first was the system of weights and measures. In all the existing Pharmacopœias the apothecaries' measures have been adopted or deduced from the "imperial standard" of ordinary trade in this country; and in the last edition of the Dublin Pharmacopœia in 1850, a similar change was effected in the apothecaries' weights. The Committee resolved to carry through the change begun in the Dublin Pharmacopœia by assimilating to one another in value the smaller weights and smaller measures. Adopting the imperial pound and ounce, they have divided the ounce weight of 437·5 grains, as all the Pharmacopœias had previously divided the corresponding ounce measure, into the convenient sub-divisions of pharmacy; so that the drachm is the 8th part, and the grain the 480th part of the ounce.

The weights and measures thus correspond with one another throughout all denominations under a pound. It will be seen that in this system the drachm and grain are about one-eleventh less than they were; and that the drachm is nearly double, and the grain about an eleventh less, than the drachm and the grain of the imperial standard. The Committee, however, satisfied themselves that no material inconvenience could arise from the latter circumstance, because the imperial drachm and grain are little used in any trade; and as to the alteration of their value in pharmacy, the inconvenience will be little, and only temporary, because a proportionate change has been made in every process of the Pharmacopœia in which it appeared to be important; nor will any inconvenience arise to the physician or surgeon in their prescriptions, as the difference of an eleventh of a dose is a matter of no moment in regard to any remedy.

The Committee did not adopt this system without taking into account the strong recommendations they received, both in and out of the medical profession, to show an example to the country at large, by adopting a decimal system of weights and measures. The Committee were strongly impressed with the great advantages of such a system, both in pharmacy and physic; but they were not prepared to say what decimal system should be adopted; and, on the whole, they were of opinion that the Legislature, and not the General Council, should take the lead in this matter.

Another important difference between the existing Pharmacopœias occurs in the nomenclature of the articles of the Materia Medica. As numerous changes were thus inevitable, the Committee have not hesitated to add others, whenever they could, by doing so, either consult the convenience of the pharmaceutic chemist and medical practitioner, or put an end to a positively false description.

A third and more serious difference exists amongst the Pharmacopœias of the Colleges, in the strength of preparations bearing the same or similar names. In this branch, too, of their duty, as amalgamation involved numerous changes in one division or another of the country, the Committee did not hesitate to make further changes, when they could thus secure the ultimate convenience of all members of the medical profession, as well as the safety of the public. The trouble to which practitioners will consequently be put for a time, will be partly compensated by greater simplicity and convenience for the future. It occurred to the Committee that all risk to the public would be avoided, and extreme facility to the practitioner attained, by so framing the formulæ for the preparations and compounds, that all articles under one Galenical form should admit of being fitly prescribed in the same dose. Difficulties of detail have prevented this convenient system from being carried out to the full extent; but it has been attended to as far as possible, and increased facility in prescription will be found to have been thus attained.

The Committee must here add, that it will be incumbent either on themselves or on the General Medical Council, to publish a warning to all pharmaceutic chemists and druggists, that, on the publication of the Pharmacopœia, it will be impossible for them to discharge their duties to the public safety unless they destroy or alter all pharmaceutic preparations they may have in store, which have been made according to present formulæ, and the strength of which is altered in the new Pharmacopœia. And a further caution must be given to all medical practitioners, that it will be hazardous for them to exercise their profession without making themselves acquainted with all changes made in the strength of officinal preparations, which changes will be carefully noticed under each article.

If the Council take into account the great extent of inquiry which the Committee have had to undertake, the necessity of consulting the opinions of three separate Sub-committees, far distant from one another, and the prior demands of a professional nature on the time and attention of all their members, no surprise can be felt that a period of three years and a half has been required to complete the work entrusted to them.

The performance of numberless experiments, the expense of Sub-committee meetings, of two conferences of the united Sub-committees, of extensive conjunct investigations in Dublin, the remuneration of secretaries, and sundry other less important charges, have involved heavy outlays and obligations, which will be much increased presently by the charges for printing and publishing the Pharmacopœia. After attentively considering in what manner the probable cost may be defrayed at least charge to the members of the medical profession, the Committee determined that the property of the work should be retained in the possession of the Medical Council.

Here, however, they have encountered a difficulty which has occasioned unforeseen delay. A doubt arose both as to the Pharmacopœia Committee having the legal right to make contracts with printers and others in the name of the Council, and as to any proceeding on the part of the Committee being sufficient to secure the copyright of the work in the Council.

As instructed by the legal adviser of the Council, the Committee are inclined to think that the Pharmacopœia ought to be laid before the Council at a general meeting, and formally sanctioned by them; and contracts must be entered into either by the Council itself, or by parties to be duly authorized to act in the Council's name.

Other legal questions have also arisen as to the copyright of the Pharmacopœia, and the power of the Council to prohibit invasion of it either wholly or partially.

On all these doubtful points it was found necessary to take legal advice. This has been done with the sanction of the President of the Medical Council, and the Committee hope to place the result before the Council at one of its early meetings.

Another question has also arisen, which involves essentially the nationality of the Pharmacopœia. The Medical Act does not contain any statutory injunction, that, after the publication of the Pharmacopœia, the Pharmacopœias of the Colleges of Physicians shall cease to have effect, and that pharmacy shall be practised according to the formulæ of the "British Pharmacopœia."

Now the London Pharmacopœia is enjoined as the standard throughout England by an order of Her Majesty's Privy Council; the Dublin Pharmacopœia is, by statute, imperative as the standard in Ireland; and in Scotland the Edinburgh Pharmacopœia is, by use and wont, as exclusively the standard, although it was never made so by statute or charter.

The Council will therefore perceive that there will be nothing to hinder any of the Colleges from republishing its Pharmacopœia, and nothing to prevent pharmaceutic chemists, apothecaries, and others, from using either that or the latest edition of the same, except public spirit and private discretion. It will, therefore, be for the Council to determine whether the "British Pharmacopœia" should issue as a discretionary guide, or should be fixed as the national standard by the Legislature. And should the Council resolve to adopt the latter alternative,

which seems to be the more advisable course, the Committee have to add that no time should be lost in obtaining a short Act for the purpose during the present session of Parliament.

R. CHRISTISON, Chairman.

The Report of the Pharmacopœia Committee was received, and entered on the minutes.

Mr. Ouvry, the solicitor, attended, and read the case submitted to, and the opinion of, counsel concerning the copyright and other papers bearing on the "British Pharmacopœia."

The "Business Committee" of the last meeting of the General Council held in 1861 was reappointed—viz., Dr. Andrew Wood, (Chairman,) Mr. Teale, Dr. Embleton, Dr. Thomson, Dr. Corrigan.

The Education Committee was reappointed, and consists of all the members of the General Council.

A Finance Committee was appointed, consisting of Dr. Burrows, (Chairman,) Dr. Sharpey, Dr. A. Smith, Dr. Andrew Wood, Mr. Arnott.

The Committee on amendment of the Medical Acts was reappointed, and consists of the following members:—Dr. Corrigan, (Chairman,) Dr. Thomson, Dr. Storrar, Dr. Apjohn, Dr. Burrows, Dr. Acland, Dr. Andrew Wood, Dr. Sharpey, Mr. Hargrave.

Mr. Ouvry was requested to lay before the General Council a draft of a case proposed for the opinion of counsel, with reference to the Educational Clauses of the Medical Act, Sects. 15, (and Schedule A therein referred to,) 20, 21, 22, and 24.

The President and Dr. Christison, as Chairman of the Pharmacopœia Committee, accompanied by the solicitor to the General Council, were requested to wait on the Secretary of State for the Home Department, to point out to him the position of the Council in reference to the publication of the Pharmacopœia, and to ask him to take such steps as may be necessary to enable the General Council to comply with Section 54 of the Medical Act.

A Committee was appointed to consider the mode of publication of the Register, and, if possible, to suggest some plan to secure its more general circulation.

Moved by Dr. Andrew Wood, seconded by Dr. Alex. Wood, and negatived,—"That reporters be admitted to the meetings of the General Council."

Dr. Andrew Wood required that the names of the majority and minority should be entered on the minutes.

Majority.—The President, Dr. Burrows, Mr. Cooper, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. Storrar, Mr. Watt, Mr. Syme, Dr. Thomson, Dr. Smith, Mr. Hargrave, Dr. Leet, Sir Charles Hastings, Dr. Sharpey, Dr. Christison.

Minority.—Dr. Alexander Wood, Dr. Andrew Wood, Dr. Apjohn, Dr. Corrigan, Mr. Teale, Dr. Stokes.

It was referred to a Committee to consider and report whether any and what steps should be taken to remove from the Medical Register the names of persons who may "have been guilty of infamous conduct in any professional respect."

MINUTES OF MEETING, THURSDAY, MAY 15, 1862.

The President stated that the Secretary of State for the Home Department had consented to receive the deputation respecting the Pharmacopœia, appointed at yesterday's meeting of the Council, to-morrow, at half-past two o'clock.

Some routine business having been transacted, the Council adjourned.

MINUTES OF MEETING, FRIDAY, MAY 16, 1862.

Dr. Sharpey presented the following Report from the Finance Committee, in reference to the expense of printing the General Register:—

The Committee recommend that estimates be obtained from three different printers of the following charges—viz.,

1. Cost of purchase of the types employed in printing the General Register.
2. Annual cost of keeping the type standing.
3. Cost per sheet of annual additions.

W. SHARPEY, Chairman.

Dr. Corrigan presented the following Report from the Medical Acts Amendments Committee:—

The Medical Acts Amendments Committee beg leave to report that they have given their most attentive consideration to the several amendments proposed to Clause 40, and that they recommend the following amendment to that clause:—

"Any person who shall take or use the name or title of Physician, Doctor of Medicine, Licentiate in Medicine and Surgery, Bachelor of Medicine, Surgeon, General Practitioner, or Apothecary, or any name, title, addition, or description, implying that he is qualified to practise any branch of Medicine or Surgery, *such name, title, addition, or description not having been granted by any of the licensing bodies mentioned in Schedule A of this Act*, shall, upon a summary conviction for any such offence, pay a sum not exceeding £20.

"N.B.—The heading of Section 40, so altered, might be—Penalty for using medical or surgical designations by persons not qualified under Schedule A."

The Committee beg further to recommend that the several reports of the Medical Acts Amendments Committees of 1860, 1861, and the present year, be referred to the Executive Committee, with instructions to consult Parliamentary solicitors, with the view of preparing a draft Bill, to be transmitted to the respective Branch Councils, for their consideration and observations. That such draft Bill, with any amendments proposed, be re-transmitted by the respective Branch Councils to the Executive Committee, in time to enable the Executive Committee to have a draft Bill ready for being submitted to the General Medical Council at its next annual meeting.

J. D. CORRIGAN, Chairman.

The Report of the Medical Acts Amendments Committee was received, and entered on the minutes.

Dr. Storrar presented the following Report from the Committee appointed "to consider and report whether any and what steps should be taken to remove from the Medical Register the names of persons who may have been guilty of infamous conduct in any professional respect."

On examining Section 29 of the Medical Act, it appears to the Committee, that while the General Medical Council are authorized, if they see fit, to erase, without further inquiry, the name of a medical practitioner from the Medical Register who shall be convicted in England or Ireland of any felony or misdemeanour, or in Scotland of any crime or offence, the name of a medical practitioner charged with infamous conduct in any professional respect, can only be erased when, after due inquiry, such medical practitioner shall be judged by the General Council to have been guilty of the infamous conduct in question.

The Committee are of opinion that the General Council, in relation to persons charged with infamous conduct in any professional respect, are intended to exercise judicial functions; and that it would not be consistent for the Council to combine with the duties of judges the functions of public prosecutors, even if the constitution of the General Council, and the means at their disposal were such as to render it practicable for them to initiate proceedings against registered practitioners chargeable with infamous conduct.

The Committee are further of opinion that all such cases should be left to be taken up by persons unconnected with the Medical Council, who should be required to produce the evidence necessary to enable the Council to adjudicate upon them, having regard to the Standing Orders of the Council, (Section 8.) "Removal of a name from the Register."

J. STORRAR, Chairman.

The Report was received, and ordered to be printed on the minutes.

The President informed the Council that the Secretary of State for the Home Department had listened, with great attention, to the representations of the deputation respecting the Pharmacopœia, and that he had desired the solicitor to send him the draft of the proposed Bill, with a letter explaining the grounds on which the Council sought legislative interference.

Moved by Dr. Acland, and seconded by Dr. Storrar,—"That the following resolutions be added to the Standing Orders of the General Council."

1. That it is within the province of Branch Councils to obtain the opinion of counsel upon all points on which they require such opinion for their guidance.

2. That when the points on which they require an opinion refer to matters belonging to the General Council, such Branch Council shall forward to the other Branch Councils a copy of the case to be submitted to counsel before it is so submitted.

3. That if such case be submitted to counsel with the concurrence of the three Branch Councils, the expense shall be borne by the General Council.

"The previous question" was then moved by Mr. Arnott, seconded by Dr. Andrew Wood, and carried.

Read the following letter from Richard Hughes, Esq., M.R.C.S. Eng. and L.R.C.P. Edin.:—

10, Clarence-square, Brighton, Sept. 21st, 1861.

SIR,—I am desirous of calling your attention to the declaration recently adopted by the College of Physicians in Ireland

as requisite to be taken by all candidates for its licence. It is thus reported in THE LANCET of August 10th, 1861:—

"I engage not to practise any system or method (so-called) for the cure or alleviation of disease, of which the College has disapproved. And I solemnly and sincerely declare, that should I violate any of the conditions specified in this declaration, so long as I shall be either a Licentiate or Fellow of the College, I thereby render myself liable and shall submit to censure of the College, pecuniary fine (not exceeding £20), or expulsion, or surrendering of the diploma, whichever the President and Fellows of the College, or the majority of them, shall think proper to inflict."

This resolution makes the first granting and subsequent tenure of the diploma of this College dependent on an avoidance of all systems of medicine disapproved of by the College, by which, of course, homœopathy is mainly intended. Now such a course of conduct is in direct contravention of Clause 23 of the Medical Act.

It is well known that Clause 23 was introduced into the Medical Act expressly to prevent any one being hindered in obtaining or deprived of his diploma on the ground of his belief in homœopathy. The King and Queen's College of Physicians in Ireland, therefore, in requiring this declaration to be taken by all candidates for its licence, has offended against both the letter and spirit of the Medical Act. And I call upon you, Sir, as President of the Medical Council, to report this proceeding to the Privy Council, that the proper measures may be taken for checking or punishing this breach of the law.

I am, Sir, your obedient servant,

RICHARD HUGHES.

(Registered under the Medical Act.)

To the President of the Medical Council.

Dr. A. Smith, the representative of the King and Queen's College of Physicians in Ireland, explained that the declaration complained of was of very old date; that the College has never expressed any opinion on any theory of medicine, and that therefore it never did impose any restraint on the practice of medicine by any candidate; and, moreover, that the declaration referred to does not exist in the present code of bye laws.

Moved by Dr. Corrigan, seconded by Sir C. Hastings, and agreed to,—"That the Council decline to take any steps in the above matter."

MINUTES OF MEETING, SATURDAY, MAY 17, 1862.

Moved by Dr. Andrew Wood, seconded by Dr. Embleton, and agreed to,—"That the returns of the number and names of candidates who have passed their respective final examinations, and the number of those who have been rejected, which have been received in compliance with the twenty third recommendation of the Medical Council, and also the returns received in compliance with the sixteenth recommendation, be referred to a Committee, who shall report upon them to the General Council."

Moved by Dr. Stokes, seconded by Dr. Apjohn, and agreed to,—"That a Committee be appointed to report on the returns received in accordance with the following resolution of the Medical Council.

"'That the Registrar be directed to communicate with the several Colleges and bodies mentioned in Schedule A of the Medical Act, with the view of ascertaining whether they have taken any steps to determine how far the certificates given to students for attendance on hospitals or lectures are granted on *bonâ fide* attendance.'" (See minutes of General Committee on Education, for Monday July 1st, 1861, sect. 2, p. 7.)

Moved by Mr. Syme, and seconded by Dr. Storrar,—"That the regulations lately issued by the College of Surgeons of England, for the qualification of candidates for their licence, are not in accordance with the recommendations of the Medical Council, and are not 'such as to secure the possession by persons obtaining such qualifications of the requisite knowledge and skill for the efficient practice of their profession.'"

Amendment moved by Dr. Thomson, and seconded by Dr. Sharpey,—"That the regulations lately issued by the College of Surgeons of England for the qualification of candidates for their licence are not in accordance with the recommendations of the Medical Council, and that the College of Surgeons be requested to re consider the grounds on which they have departed from the recommendations of the Council, and to state whether or not the regulations lately issued by the College in reference to professional study, are intended to be merely of a temporary nature, or whether it is the intention of the College, at an early period, to bring their regulations into entire conformity with the standard recommended by the Council."

"The previous question" was then moved by Dr. Corrigan, seconded by Dr. Apjohn, and carried.

Dr. Andrew Wood required that the names of the majority and minority should be entered on the minutes.

Majority.—Mr. Arnott, Mr. Cooper, Dr. Acland, Dr. Bond, Dr. Embleton, Mr. Watt, Dr. A. Smith, Mr. Hargrave, Dr. Apjohn, Dr. Corrigan, Mr. Lawrence, Mr. Teale, Dr. Stokes.

Minority.—Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Mr. Syme, Dr. Thomson, Dr. Leet, Dr. Sharpey, Dr. Christison.

MINUTES OF MEETING, MONDAY, MAY 19, 1862.

Moved by Dr. Leet, and seconded by Mr. Syme,—"That the General Medical Council having by its recent finding declared the nature of the qualification conferred by the licence of the Apothecaries' Hall of Dublin to be 'a purely legal question,' instructions be now given to the solicitors of the Council to prepare, with the assistance of a Select Committee, a draft case for the opinion of counsel, in reference to the question asked by the Director-General of the Army Medical Department in his letter of the 22nd of June, 1861."—The motion having been put, was negatived.

Read the following letter from the Branch Council for Scotland, which was ordered by the Branch Council for England to be referred to the General Council. (See minutes of English Branch Council, No. 15, for 27th December, 1861, sect. 5, p. 6.)

Scottish Branch of General Council of Medical Education and Registration.
28, Albany-street, Edinburgh, Dec. 7, 1861.

SIR,—At a meeting of this Branch of the Medical Council held to-day, I was directed to write to the English Branch Council, to ascertain whether their attention has been called to the subjoined regulations of the Royal College of Surgeons of England, viz.:—

"PROFESSIONAL EDUCATION.

"I.—Candidates who shall commence their professional education on or after October 1st, 1862, will not be allowed to register the commencement of attendance on lectures or hospital practice before they have passed an examination in general literature, in conformity with the regulation of the Council in relation thereto.

"II.—The following will be considered as the commencement of professional education:—1. Attendance on the practice of an hospital, dispensary, or other public institution, recognised by this College for that purpose.* 2. Instruction as the pupil of a member of one of the Royal Colleges of Surgeons in the United Kingdom, or of the Faculty of Physicians and Surgeons of Glasgow.* 3. Attendance on Lectures on Anatomy, Physiology, Chemistry, or Natural Philosophy, by lecturers recognised by this College."

(*The Lancet*, Sept. 21st, 1861, p. 275.)

I have to request that this letter may be submitted to next meeting of the English Branch Council.

I am, Sir, your obedient servant,

(Signed) WILLIAM ROBERTSON,

(Branch Registrar, Scotland.)

Dr. Hawkins, 32, Soho-square, London.

Moved by Dr. Thomson, and seconded by Dr. Sharpey,—"That the regulations lately issued by the College of Surgeons of England for the qualification of candidates for their licence, not being in accordance with the recommendations of the Medical Council, the College of Surgeons be requested to re-consider the grounds on which they have departed from the recommendations of the Council, and to state to the Council in how far the regulations recently issued are to be regarded as merely temporary, and in how far the Council may expect the College at an early period to bring their regulations into conformity with the standard recommended by the Council."

Amendment moved by Dr. Corrigan, and seconded by Dr. Stokes,—"That it be an instruction to the Executive Committee to obtain returns of the regulations relative to education and examination from the several licensing bodies mentioned in Schedule A; to ascertain in what particulars the regulations of any of those bodies may differ from the recommendations of the General Medical Council; to request from those corporate bodies whose regulations so differ, such observations or explanations as they may deem fit to offer; and to submit the correspondence, with their report thereon, to the next meeting of the General Medical Council."—Amendment carried.

* "Attention being paid in either of these cases to Practical Pharmacy."

Dr. Andrew Wood required that the names of the majority and minority should be entered on the minutes.

Majority.—The President, Mr. Arnott, Mr. Cooper, Dr. Acland, Dr. Bond, Dr. Embleton, Dr. A. Smith, Dr. Apjohn, Dr. Corrigan, Mr. Lawrence, Mr. Teale, Dr. Stokes.

Minority.—Dr. Burrows, Dr. Storrar, Dr. Alexander Wood, Dr. Andrew Wood, Mr. Watt, Mr. Syme, Dr. Thomson, Mr. Hargrave, Sir Charles Hastings, Dr. Sharpey, Dr. Christison.

Moved by Dr. Storrar, seconded by Dr. Corrigan, and agreed to,—"That the draft case respecting the educational clauses of the Medical Act, as returned from the solicitors, be approved, and submitted to counsel."

Moved by Dr. Storrar, seconded by Dr. Alexander Wood, and agreed to,—"That the counsel to whom the case shall be referred be the Solicitor-General and Mr. Selwyn."

Moved by Dr. Stokes, seconded by Mr. Hargrave, and agreed to,—"That the several reports of the Medical Acts Amendments Committees of 1860, 1861, and the present year, be referred to the Executive Committee, with instructions to consult parliamentary solicitors, with the view of preparing a draft Bill, to be transmitted to the respective Branch Councils, for their consideration and observations. That such draft Bill, with any amendments proposed, be re-transmitted by the respective Branch Councils to the Executive Committee, in time to enable the Executive Committee to have a draft Bill ready for being submitted to the General Medical Council at its next meeting."

Moved by Dr. Alexander Wood, seconded by Dr. Storrar, and agreed to,—"That in all cases where returns are required by the Council from the bodies in Schedule A to the Act, the Registrar of the Council be directed to give notice to the several bodies at least one month before such returns have to be rendered."

MINUTES OF MEETING, TUESDAY, MAY 20, 1862.

Moved by Dr. Storrar, and seconded by Dr. Sharpey,—"That inasmuch as persons deriving qualifications to practise physic from the Royal College of Physicians of London, are legally entitled to practise surgery, it is the duty of the said College to take steps to secure that such qualifications shall not be conferred on persons whose attainments in surgery have not been duly ascertained."

Amendment moved by Mr. Syme, and seconded by Dr. Alexander Wood,—"That the Council are fully satisfied, by the statement of Dr. Burrows, that the College of Physicians are taking proper steps for ascertaining that their licentiates are qualified to exercise all the powers of practice conferred upon them."—Amendment negatived.

The original motion was then put and negatived.

A memorial from the Gloucestershire Medical and Surgical Association, respecting Clauses 15 and 40, was read, and was referred to the Executive Committee.

Letters respecting the provisions of the Medical Act were read from Mr. McNeice, of Canada, Mr. S. Gower, of Natal, and Dr. Anderson, of Penang. These letters were referred to a Committee.

Moved by Mr. Syme, and seconded by Mr. Hargrave,—"That the Council adopt the following resolutions:—

"1. That the Council has resolved that no licence to practise Medicine or Surgery shall be conferred upon any one who has not completed four years of professional study.

"2. That the Council has also resolved that apprenticeship or pupilage shall not constitute the commencement of this professional study.

"3. That the College of Surgeons of England has lately issued regulations to the candidates for their diploma, which allow apprenticeship or pupilage to constitute the commencement of professional study; and also allow another year to be constituted by attendance upon a recognised hospital, so as to limit the period of study at a medical school to two years and three months, or fifteen months in all.

"4. That the Council having declined to notice this departure from their requirements, and thus recognised an independent power of action in one of the licensing bodies, it is, therefore, unnecessary to take any further step for interpreting the educational clauses of the Medical Act."—The motion was put and negatived.

LUNATICS.—A return has been issued accounting for 1233 idiots and 18,919 lunatics now confined in lunatic asylums in England and Wales. The lunatics are described as—curable, 2390; incurable, 16,529.

Correspondence.

"Audi alteram partem."

POOR-LAW MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—Dr. Fowler, in his letter in your journal of the 17th inst., informs us that he has given evidence before the Select Committee of the House of Commons in favour of a payment in proportion to pauperism, &c., which I greatly regret, as I am perfectly convinced it will not work. He likewise tells us that Dr. Moore gave evidence, "and also strongly objected to the principle of the per-case system." In another part of his letter he says: "And what does Mr. Griffin offer us as an alternative? A scheme which, on every day of every year, and every hour of every day, will result in bodily suffering and mental distress to the sick poor; and at every quarter day will regale the mental comfort of every medical officer with a squabble with his board of guardians."

Allow me to refer you to page 6 of the Evidence, wherein it is provided by me "that a list shall be made out every quarter of all paupers in receipt of relief, which shall be given to the medical officers; and that it shall be the duty of the medical officers to attend all the paupers on the aforesaid list without any specific orders, the application from the parties sick or any one in their behalf being a sufficient authority." Does this justify the Doctor's assertion of suffering to the poor? If you turn to page 21, you will read: "From and after the 24th day of June next, the salary of the present and all future medical officers shall be fixed in accordance with the number of patients attended by them, or their predecessors in office, on an average of the last three years, and annually for three years a fresh calculation shall be made on an average of the three preceding years; after which a triennial calculation shall be made." Surely this does not authorize Dr. Fowler in saying "at every quarter day," &c. The fact is, the plan of the Association is a fixed salary, triennially calculated on an average of the three preceding years, and only annually calculated for the first three years in order that those who have kept their books in a loose way may have an opportunity of getting them in order; but after that it is a triennial calculation, and not a "quarterly squabble," as Dr. Fowler asserts. The fact is the Doctor makes a great mistake, and confounds the plan delivered in by him on behalf of his London brethren with that of mine; and therefore all the thunderbolts he is hurling at my head recoil upon his own, the correctness of which you will see by referring to page 34 of the Evidence, wherein is recorded the plan of the metropolitan men as delivered in by Dr. Fowler himself:—"4. That the only just and equitable mode of payment is by a certain fixed sum per case, in accordance with the recommendation of the Poor-law Commissioners in their minute dated June 6th, 1839. 5. That at a minimum computation no less than 2*s.* 6*d.* per case in the metropolis, and than 5*s.* in the provinces, can compensate the medical officer for his services." Is not this convincing? Dr. Fowler now says: "Men of the world know full well that no restrictions devisable could, under the per case system, prevent, in the hands of a dishonest officer in a large district, the production of any number of cases he wished to be paid for."

In another part of his letter he says, "the objections attachable to and inseparable from the per-case system of payment." Again: "But for the sake of the sick poor, with a due regard to the pockets of the ratepayers, and for the sake of our own mental comfort, I have endeavoured to devise a substitute for so impracticable and impolitic a scheme as the per-case system of payment." Dr. Fowler, I feel assured, cannot be angry if I quote his own words in reply to this. On the 23rd of July, 1861, Dr. Fowler was examined before the Select Committee of the House of Commons, and laid before them the plan of the metropolitan men, and made the following statement (see p. 91 of the Report):—"Speaking as the honorary secretary of the Association of the Metropolitan Poor-law Medical Officers, I may state that in their opinion the only just and equitable mode of payment is by a certain fixed sum per case, in accordance with the recommendation of the Poor-law Commissioners in their minute dated 6th June, 1839. The following sentence occurring in the minute gives good reasons why this mode of payment would be just and equitable: 'As regards the able-

bodied labourers, whilst there will be no temptation to the guardians to administer (as under the system of remuneration by gross fixed salary) relief to individuals of this class indiscriminately at the expense of the medical officer, there will at the same time be no inducement to refuse it when really necessary, inasmuch as the system of payment per case admits of medical relief being granted by way of loan.' Despite this opinion of the Commissioners, one absurd objection rises like a bugbear in opposition to this mode of payment—viz., that it would be the interest of the medical officer to 'manufacture cases.' But, admitting, for the sake of argument, the practicability of such a proceeding, is it to be supposed that the vigilance of boards of guardians and their instructions to the relieving officers would not be an effectual check and counterpoise? Besides, let the average number of cases attended during the last three years be taken as the basis on which to found the salaries of the medical officers at starting this plan; for, as gross fixed salaries have in the majority of unions been the custom hitherto, of course it has rather been the interest of the medical officers to keep down their cases. The average obtained would therefore be an approximate and safe guide for future triennial revisions." Dr. Fowler will possibly say he then spoke as the hon. secretary of the metropolitan men; but surely, if he had at that time "a waning faith in the per-case system of payment," he might have been content to have laid the bare plan of his London brethren before the Committee, and not have volunteered the foregoing statement, which, after all, was not said off-hand, but was carefully written and delivered in to the Committee after his examination.

I gather from the remarks made by Dr. Fowler that his superannuation clause was never intended to be of benefit to any union medical officer, excepting those who gave the whole of their time to the service of the union. I have no doubt his brethren will thank him for its introduction.

The Doctor next says, "I also crack that nut which has been so hard a one to many—What is a case of sickness?" Now, there is nothing in this to take so much credit about, excepting that he reduces the payments of the medical officers by making each order to last half a year, whereas I count each fresh case of sickness. The fact is, the Doctor's plan is a guardian's plan, and not one for the medical officer.

Dr. Fowler next says, "Besides, Mr. Griffin's suggested method has already been decidedly and emphatically denounced by an authority (Hon. Sotheron Estcourt) stating, *ex cathedrâ*, that Parliament had so strong an objection to such a system (the per-case) that it would be impossible to get them to agree to it." The reply to this is, the per-case system is that of the metropolitan officers, as laid by Dr. Fowler before the Select Committee; and therefore if Mr. Estcourt denounced it, he denounced a plan which was subsequently advocated by Dr. Fowler before the Select Committee; but I think Dr. Fowler's quotation of the ex-President's words is not quite as delivered by him, as will appear from the following quotation (see pink-coloured pamphlet, page 30).

"The President: If it may be said that the medical officer is at the mercy of the guardians because it is in their power to diminish the number of paupers in January and July, he is still more in their power under the per-case system, because they would have nothing to do but direct the relieving officer to diminish the number of orders. But if the total amount is to be provided out of the Consolidated Fund, then there would be no individual interest to reduce the amount. But if this were done the Treasury would take the place of the guardians and provide some sort of check on the number of cases. I do not think that you can ever expect Parliament to consent that it should be simply at the discretion of the party—I may say, without offence, the interested party. I am glad to have this opportunity of meeting so many of you, and I am obliged to you for the information you have communicated. I will take this opportunity of saying, that in the correspondence I have had with Mr. Griffin, who has been the most prominent member of your body, I have been pleased and gratified at the business-like way in which he has dealt with the subject. This is not a mere question of feeling, for if we went into that we should never get out of it; but the question is, how we can best provide an improved system of medical relief for the poor. We want a scheme which will by its justice overcome opposition. That is my object."

Dr. Fowler says: "A scheme, too, which whilst it will bring 'substantial relief to the profession' has not, as yet, met with that authoritative denunciation above quoted; on the contrary, its essential clauses have already 'been largely approved by so influential a member of Parliament' as Mr. Sotheron Estcourt himself."

On the part of the metropolitan medical officers, whose pet scheme Dr. Fowler so unmercifully lashes, I call upon him to prove that Mr. Sotheron Estcourt has, by word or writing, "largely approved" of his (Dr. Fowler's) plan. At the deputation to the Poor-law Board (see p. 28 of the pink-coloured pamphlet) the following conversation ensued:—

"Dr. Prior: My friends are in favour of a fixed salary based on the number of paupers. I am glad to hear you, sir, advocate that plan.

"The President: I did not; I am in favour of my own scheme,"—clearly proving Mr. Estcourt did not "approve" the plan now advocated by Dr. Fowler.

Dr. Fowler says, "I have now tried a great many of the provincial districts by the figures in Lord Elcho's return, and I firmly believe that my plan with this last improvement will meet all the infinitely varied and complicated cases of the provinces. At all events, figures, not opinions, can convince me to the contrary."

Now I here call upon Dr. Fowler to give a list of the paupers, the number of patients, the present salary of each medical officer, the salary by his proposed plan, and the average amount per patient for each medical officer, in the following Unions, taking the figures from Lord Elcho's return as they are there reported—City of London, Epsom, Staines, Epping, Highworth and Swindon,—being one from each of the first five divisions; and your readers will then judge of the value of his plan, which I unhesitatingly pronounce will not work in an equitable manner.—I am, Sir, your obedient servant,

12, Royal-terrace, Weymouth, May, 1862. RICHARD GRIFFIN.

P.S.—The master and wardens of the Society of Apothecaries have forwarded to me a petition for presentation to the House of Commons, a copy of which is annexed. The council of the British Medical Association have also been good enough to draw up a memorial to the Select Committee. I feel assured that I am only uttering the sentiments of my brethren when I express our best thanks for their efforts on our behalf. But every medal has its reverse side; and I regret to say that Mr. Carne, Poor-law inspector, has given evidence at considerable length against our claims for redress. He says, "I do not think the present system of medical relief admits of any particular recommendation with a view to the increase of its efficiency." Mr. A. Doyle, another Poor-law inspector, says, "I think that if a medical officer were elected every three years, instead of holding his appointment, as now, permanently, it would be an improvement. I would confine the three-years appointment to the medical officers only." Comment is unnecessary.

"*To the Honourable the Commons of the United Kingdom of Great Britain and Ireland in Parliament assembled.*

"The petition of the undersigned Master and Wardens of the Society of the Art and Mystery of Apothecaries of the City of London humbly showeth,—

"That your petitioners are well assured that it would be the wish of the Legislature that the poor should receive adequate medical relief in the hour of sickness and suffering, and that your Honourable House would not withhold the necessary means for securing that object.

"That your petitioners are painfully convinced of the total inadequacy of the existing arrangements for such medical relief, and of the injury to the sick and suffering poor resulting therefrom.

"That if a searching inquiry were directed by your Honourable House into the existing arrangements for the medical relief of the poor, it would not fail to result in the adoption of a system of relief more in accordance with the necessities of the poor, and more in harmony with the humane and enlightened legislation of modern times.

"That one very great evil of the existing system is the wretched pittance offered in the majority of instances to the Poor-law medical officers, who are permitted to discharge their anxious and responsible duties on a scale of remuneration (so called) which in many cases leaves them actually out of pocket for the medicines which they administer, leaving skill and labour wholly unrequited; and that such a state of things, apart from the injustice to the medical officers, is calculated to affect very prejudicially the welfare of the suffering poor.

"Your petitioners therefore humbly pray that your Honourable House will grant a full and searching inquiry into the present system of Poor-law medical relief, with a view to the redress of the grievances which are the result of the present system.

"W. BUCHANAN, *Master.*
"RICHARD CLEWIN GRIFFITH, } *Wardens.*"
"HENRY COMBE, }

ANÆSTHESIA IN MIDWIFERY.

To the Editor of THE LANCET.

SIR,—In the report of the proceedings of the Obstetrical Society of London contained in your last number it is stated that Dr. Priestley considered my apparatus too *fragile* for the purpose of administering chloroform. Allow me here to observe that my answer to Dr. Priestley is not given—namely, that before giving his opinion it would be better that he first *handled* it (he had only *seen it at a distance* when he said so). I would further remark that what he did see was an apparatus of my own rude construction, which had unfortunately met with an accident before exhibiting it to the Society. As I have had an extensive experience of the practical strength and general utility of the apparatus, I beg to state that it is in nowise fragile, but will stand with impunity the roughest usage it is ever likely to meet with. In point of economy, *it saves from 60 to 70 per cent. of chloroform.*

I very much regret that, from unavoidable circumstances, I was too late in sending an abstract of my paper to the Secretary of the Society for publication in your pages. Let me trust that I am not too late to be allowed to state that since my paper was read I have succeeded in getting my apparatus made to my entire satisfaction, if not greatly improved, by Messrs. Maw and Son, of 11, Aldersgate-street, London, where specimens may be seen, as also in their cases at the International Exhibition, Kensington. Two kinds have been made by them—one for carrying in the crown of the hat, and another for a leather case.

I remain, Sir, your very obedient servant,

Liverpool, May, 1862. THOMAS SKINNER, M.D.

THE MEDICAL PROFESSION AND LIFE ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—The "Atlas" and the "Consolidated" Life Assurance Societies must be excluded from the list of offices which pay medical practitioners for their reports on the lives of patients. Within the last two or three months I have received the usual printed form of queries to be answered by the medical attendant from both these offices, but neither fee nor promise to pay one accompanied the letter. I followed my usual practice, by immediately returning to the secretaries or actuaries the papers, endorsed with the information that I should be happy to devote my time to the matter, and give my professional experience as to the eligibility of the proposed lives for assurance, upon receipt of the fee of one guinea. I received no reply, nor have I yet taken the trouble to inquire whether my patients' lives were accepted.

As it is so very desirable that the profession should be supplied with a correct list of offices paying their private medical referees, it is to be hoped that practitioners will comply with the request contained in your leading article of March 15th, and forward to you from time to time the names of the non-paying offices.

I am, Sir, your obedient servant,

Yealand Conyers, near Lancaster, May, 1862. P. ALLEN, M.D.

MIDWIFERY STATISTICS.

To the Editor of THE LANCET.

SIR,—The following remarks are formed from note-books extending over a period of twenty years' practice, and embracing 3381 cases in midwifery:—

The head presented in the second position (left side of the head) in nineteen cases.

Nates presentations numbered twenty-nine cases; footling, twenty-one.

The cheek presented five times.

Arm and shoulder presented seven times.

The cord was found prolapsed in four patients.

Placenta prævia occurred six times—(four partial, two complete).

Twins presented thirteen times; triplets but once.

Monstrosities occurred four times.

The forceps were used in twenty-two cases.

Turning was performed twelve times.

Craniotomy was resorted to in eleven cases.

Spontaneous evolution occurred in one case.

The youngest patient wanted three weeks to complete her fourteenth year; the eldest was forty-five years of age.

The shortest cord measured five inches; the longest fifty-eight. The cord had double knots on it in three cases; and single knots in four.

Encysted placenta happened in fifteen cases, the lower segment of the uterus near the os internum being generally the seat of stricture.

In one case of twins the first child was born at twenty minutes to seven in the evening, the second at ten minutes past ten the following morning. No pains occurred during this long interval, and I could not persuade the patient that a second child was in utero.

I am, Sir, your obedient servant,

Paddington-green, May, 1862. JOHN H. BEALE, M.R.C.S.

CONSULTATIONS WITH HOMŒOPATHS.

To the Editor of THE LANCET.

SIR,—The note of "Inquirer" in last week's LANCET respecting Dr. Clay and his consultations with homœopaths touches on a matter that wants explanation.

Dr. Clay *does* meet homœopaths, and I believe regularly. Three instances of deliberate consultation have occurred within my own knowledge.

I am, Sir, yours, &c.,

Manchester, May, 1862. RESPONDENT.

P.S.—I enclose my card.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

A FUNERAL ORATION pronounced at the tomb of M. Bretonneau by the oldest and certainly not the least distinguished of his disciples, M. Velpeau, merits some notice as happily portraying the leading characteristics of the illustrious medical veteran of Tours who has recently passed from amongst us. "His great reputation," observed M. Velpeau, "was due neither to a fortuitous combination of circumstances, nor to the influence and interest of the great. The celebrity he attained was unsought by himself, and was unconnected with either academical triumph or popularity-hunting. Absorbed by the pursuit of science, and at a distance from the social crises of his generation, he acquired fame unwittingly. In order to be just to Bretonneau, his character should not be estimated by the common standard of men; his life, his thoughts, his actions, were wholly unlike those of others. His hours for work were irregular, as were his times for repose and refreshment. When an object or occupation arrested his fancy, his pursuit was incessant and untiring. Whilst engaged in the investigation of typhoid fever and diphtheria, he would turn his back on those who spoke to him of any other subject. If the bell rang, he would say to me, 'Go, my friend, and inquire whether the case be one of either sore-throat or fever: if so, I shall attend immediately; if otherwise, say that I am not at home.' Did he, on returning from his morning visit to the hospital, by chance step into his garden, his patients were no longer thought of, and his mind became absorbed by his vegetables, his grafts, and his settings. In operating for cataract on one occasion, he found that the form of needle then in use was inconvenient: he immediately set about inventing another (that now commonly employed). For fear of being misunderstood by the workman, he insisted on forging it himself, and for three days could not be persuaded to leave his workshop. A similar occurrence took place with regard to certain vaccine tubes. When interested in a case, he would remain for hours at the bedside of a patient, returning as often as he believed any knowledge was to be gained from the study of the particular malady. His object was neither the gratification of vanity, nor glory; but simply the extension of science and truth. During the epidemics of sore-throat and fever, his brother-practitioners, in refutation of his doctrines, maintained that the morbid appearances observed by Bretonneau at the hospital differed from those noticed in private practice. To obtain autopsies with the consent of the friends of the deceased was most difficult; nevertheless, Bretonneau was determined to carry his point, and, with my assistance, at night, no less than thirty-six post-mortem examinations were clandestinely obtained by exhumation of the dead. On more than one occasion our profanations were suspected, and we were fired upon. I have every reason to remember the circumstances, from the

fact that I still possess a shot in the thigh in *souvenir* of my nocturnal expeditions. Bretonneau was triumphant; the scientific problem was solved: the pathological lesions occurring in private practice were found to be identical with those observed in the hospital. Bretonneau had an investigating and independent mind, at once deep and penetrating. He was an accurate, sagacious, and original observer. Whatever he touched he fully explored; and nothing left his hands without having been modified, improved, or completed. In conversation he was rich in instruction and full of practical deduction. It might have been expected that such a man would die master of a great fortune. But no; money was as immaterial to him as glory, and his charitable liberality was too well known not to be profited by. Touraine may well be proud of having given birth to such a son, and class his name with those of Descartes, Rabelais, and Paul Louis Courrier. The memory of Bretonneau will remain as distinct from that of all others after his death as was his character during life."

A short communication read at the Academy of Sciences by M. Robinet, gives the result of his experiments on the mode in which the saline constituents are affected by congelation. It has been long known to chemists that flakes of ice formed by the freezing of sea-water, when washed so as to remove the external coating of salt, yield a liquid almost as pure as distilled water. Having in the course of certain experiments on drinking-water noticed the variations produced in the specimens under examination by freezing, he had arrived at the following conclusion—namely, that in the congelation of potable waters the small quantity of calcareous or magnesian salts which they contain is removed in the same manner that the more soluble salts dissolved in sea-water or in any artificial saline liquid. Such is the purity of the water obtained by the melting of ice, that under ordinary circumstances it may be used as a substitute for distilled water.

The King of Holland during his late stay here visited the Hôpital Lariboisière, the arrangements of which (so say the official reports) elicited his warmest approbation. The King and his suite, together with Baron Larrey and the Dutch Minister, were received by the Director of Public Assistance, M. Husson, and by the physicians of the hospital. The Salpêtrière was likewise honoured by a visit from the Queen of Holland, who shares her husband's interest in all public charities. Her Majesty made a handsome donation to a poor woman who had reached her 100th year, and conversed very affably with many of the patients.

The somewhat too mild punishment of two years' imprisonment and a fine of 600 francs, has been awarded by the Correctional Tribunal to a miscreant of the name of Jamin, for illegally practising medicine, and thereby causing the death of a Madame Foucault, who had placed herself under his care. The accused, an uneducated man, by occupation a Burgundy vine-dresser, was what is commonly known in France as a *rebouteux*, and moreover a cancer-curer. He began to practise in his neighbourhood, but it would appear without much success, as at Joigny and Auxerre his medical doings continually brought him into collision with the authorities. He therefore changed his ground, and, coming to Paris, associated himself with a regularly qualified (*proh pudor!*) physician, in order to evade the law, filling the newspapers with wondrous details of his rapid cure for cancer. His victim, Madame Foucault, the wife of a rich landowner in the Charente Inférieure, was suffering from cancer in the breast, and, attracted by his specious advertisements, applied for the promised relief. Jamin's charges were exorbitant. He demanded 18,000 francs if he attended the lady in her own country, or 7000 francs if at Paris. She preferred the latter arrangement, and placed herself under his treatment in January last. His attendance continued up to the 4th of March, when she suddenly expired. The suspicions of her attendants that she had been poisoned led to the performance of an autopsy, when the latter fact was verified and accounted for by the discovery of large quantities of orpiment lodged in incisions purposely made in the diseased breast. Jamin was at once arrested, and, of course, condemned. The physician who had countenanced the charlatanry of this ignorant quack, declared that the secret of the remedy had never been communicated to him. He very properly got a severe rebuke from the President.

Paris, May 20th, 1862.

CHOLERA has made its appearance in Adelaide. The inhabitants of New Zealand are in some anxiety respecting its introduction to that country in consequence of the frequency of the communications which take place between Adelaide and Auckland.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone the necessary examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 20th inst.:—

Antonini, Charles, Surbiton Park, Surrey.
Clarke, Julius St. Thomas, Leicester.
Connor, James Henthorn Todd, Wandsworth.
Cookson, Albert Neafield, Stowmarket.
Cox, Albert George, Chard, Somerset.
Fawens, Henry Robert, South Charlton, Alnwick.
Foote, Harry, Coni-borough, Yorkshire.
Gouldsbury, Valerius Shipton, Galway.
Mackem, Walter, Blackheath.
Rouse, Thos. Matyear, Coleshill-street, Eaton-square.
Smith, John, Edinburgh.
Smith, Thos. Littlehales, Victoria Iron Works, Monmouth.
Taylor, James Alonzo, Great Barr, near Birmingham.
Thelwall, William, Farndon, near Chester.
Thomas, George Jenkyn, Haverfordwest.
Topham, Herbert, Derby.
Wallace, John, Turriff, Aberdeenshire.
Wilson, Thomas, Edinfield, near Bury.

The following gentlemen were admitted Members on the 21st inst.:—

Baddeley, William, Wellington, Shropshire.
Barker, Elijah, Sheffield.
Biddle, Charles Henry, Newcastle.
Churton, Thomas, Leeds.
Comerford, Michael, Galway.
Couch, John Quiller, Polfurrow, Cornwall.
Curtis, Thomas Heath, Alton, Hampshire.
Duckworth, Dyce, Liverpool.
Edwards, John, Birmingham.
Harvey, John, Birmingham.
Lee, Matthew, Bradford, Yorkshire.
Lynam, John, Weston Favell, Northampton.
Murgatroyd, Thomas, Shipley, near Bradford.
Oglesby, Robert Parr, Gomersal, near Leeds.
Paton, Robert, Manchester.
Procter, James, Iron Bridge, Shropshire.
Sanders, Geo. Bedford Salvator, Williamstown, Co. Dublin.
Steward, Thomas Theodore, Wolverhampton.
Tomlinson, Philip Richard, Wakefield, Yorkshire.
Turner, John, Stickney, Lincolnshire.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 15th inst.:—

Bendall, James, Trowbridge, Wiltshire.
Corbett, Thomas, St. Thomas's Hospital.
Fletcher, Joseph Lyon, Manchester.
King, Samuel, Upper Stamford-street.
M'Lean, Hugh, Newcastle-on-Tyne.
Saul, William, Banbury, Oxon.
Swain, Isaac Howard, St. Olives' Rectory, Hart-street.
Thorne, Thomas Henry, St. Bartholomew's Hospital.

UNIVERSITY OF ABERDEEN: GRADUATES IN MEDICINE, APRIL, 1862.—On the 26th ult., at the close of the Medical Examinations,—which have been conducted during the last three weeks by the Professors of the Medical Faculty and the Assessors nominated under a late Ordinance by the University Court,—Degrees were conferred by the Vice-Chancellor on the following candidates, viz.:—

*** The names are arranged alphabetically, except in cases of Honours, which stand in order of merit.

The Degree of M.D. on the following:—

Mackie, David,
Barclay, John,
Fraser, Angus,
Yule, Alexander,
Davies, D. Williams,
} Honourably distinguished.

Conson, William.
Eadon, Samuel Bailey.
Grant, William Henderson.
Low, Ernest.
Maclean, Archibald.
More, Robert Hall.
Pickthorn, George Russell.
Reid, William.
Stables, William.

The Degree of M.B. on the following:—

Turner, Alexander,
Maclean, George,
Maclagan, Alex. S.,
Brebner, Alexander,
Duguid, William R.,
} Honourably distinguished.

Keith, Alexander Dalziel.
Suther, James Benjamin Fraser.

The Degree of M.C. on the following:

Barclay, John.
Brebner, Alexander.
Davies, David Williams.
Duguid, William Robert.
Eadon, Samuel Bailey.
Grant, William Henderson.
Fraser, Angus.
Low, Ernest.
Keith, Alexander Dalziel.
Mackie, David.
Maclagan, Alexander Stourmont.
Maclean, Archibald.
Maclean, George.
More, Robert Hall.
Pickthorn, George Russell.
Reid, William.
Stables, William.
Suther, James Benjamin Fraser.
Turner, Alexander.
Yule, Alexander.

At the same time, the following candidates were declared to have passed part of their Medical Graduation Examinations:—

Astley, Harvey Eustace.
Beattie, James Forbes.
Blacklock, Arthur Woolsey.
Botha, Theunis Johannes.
Brown, David Dyce.
Brown, John.
Burnett, Charles Henry.
Busfield, Harcourt Macleod.
Campbell, Alexander.
Campbell, George M'Ivor.
Clark, Stewartson.
Collins, Robert.
Connon, Thomas.
Cosgrove, William Dunbar.
Davidson, Samuel.
Fairweather, A. F. Angus.
Fraser, John.
Propier, Gabriel.
Gage, James Thomas.
Grant, John.
Harvey, Robert.
Gauld, William.
Hector, James.
Henderson, James Foote.
Innes, James Alexander.
Keith, Robert.
Kerr, David Arthur.
Knowles, Benjamin.
Knowles, George Symmers.
Leslie, David Arthur.
Mackendrick, John Gray.
Macmillan, Andrew.
Macpherson, John.
Milne, James Green.
Minty, Alexander.
Murray, sen., John.
Murray, jun. John.
Ogston, Alexander.
Padfield, Francis James.
Paterson, William.
Pitcaithly, Lawrence.
Reid, John.
Shand, John.
Shepherd, Peter.
Simpson, John.
Smart, Charles.
Smith, James Dear.
Smith, William James.
Souter, John Clement.
Stables, William.
Stewart, William Henry.
Thomson, George.
Troup, Robert William.
Watt, Thomas.
Webster, Thomas Black.
Wight, John.

ROYAL COLLEGES OF PHYSICIANS AND SURGEONS, EDINBURGH: DOUBLE QUALIFICATION.—The following gentlemen have passed their First Professional Examinations during the May sittings of the Examiners:—

Boyd, Hugh, Ayrshire.
Collier, Hopetoun Currie, Dumfriesshire.
Mackay, John, Caithness-shire.
M'Keogh, John J., Co. Tipperary.
Stobie, Robert, Caithness.
Turnbull, Dennis, Durham.
Waite, William, Yorkshire.

The following gentlemen have passed their Final Examinations, and been admitted L.R.C.P.E. and L.R.C.S.E.:—

Bland, George, Kerry.
Dickson, James, Perthshire.
Labonté, Jules, Mauritius.
M'Bean, Samuel, Balmaghie.
Stockwell, George, Musselburgh.
Walker, James, Edinburgh.
Wright, Edward, Nottingham.

ROYAL COLLEGE OF SURGEONS, EDINBURGH.—The following gentlemen have passed their First Professional Examinations during the May sittings of the Examiners:—

Brown, John, Haddington.
Craw, John, Earlston.
Cunningham, Robert O., Prestonpans.
Lorraine, Walter, Dumfriesshire.
Munro, Alex. D. H., Edinburgh.
Pringle, John, Edinburgh.
Robertson, John, Blair-Athell.
Smith, James, Dumfriesshire.
White, Peter, Haddington.

The following gentlemen have passed their Final Examinations, and obtained the diploma of the College:—

Boulton, Percy, Beverley.
Carroll, Richard, Limerick.
Cunynghame, Robt. J. B., Edinburgh.
Campbell, Wm. Watson, Yetholm.
Davis, Wm. Hancock, Newry.
Dewar, Alex., Kincardine-on-Forth.
Fyfe, George, Leith.
Jolly, Robert, Fermanagh.
Lightbody, John, Peebles.
Laidlaw, John, Milligan, Dumfriesshire.
Maxwell, Peter, Ayr.
M'Lean, John Mackenzie, Argyllshire.
Russell, William, Edinburgh.
Robertson, James Davison, Orkney.
Robertson, Adam, Dunfermline.
Swanton, James Robert, Co. Cork.
Watson, Wm. Riddell, Glasgow.

MUSEUM AT WEIMAR.—A new museum is about to be built at Weimar.

DEATH FROM EATING TUTU BERRIES.—Several persons have recently suffered serious illness from eating tutu berries. One case has proved fatal.

BITES OF ADDERS.—The "Sussex Express" contains accounts of two little boys who, while bird's-nesting, were bitten in the fingers by adders. One died; the other recovered.

MURDEROUS ATTACK ON A SURGEON.—On the 24th ult., three men were fully committed for trial at the Supreme Court at Auckland, New Zealand, charged with stabbing Dr. Neill.

CRYSTAL PALACES AND COVERED STREETS FOR INVALIDS.—A correspondent of *The Builder*—Mr. Francis Barham, of Bath—suggests the formation of sanitaria, on the Crystal Palace principle, for invalids, and also arcaded streets.

THE SMOKE NUISANCE.—Mr. Smith, of Camborne, has recently registered an apparatus for preventing the injurious effects occasioned by smoke, sulphur, and the deleterious gases which escape from stacks, chimneys, calcining houses, and chemical or other furnaces.

LUNACY REGULATION BILL.—This Bill, which has been passed and sent down by the Lords, was read a second time in the House of Commons on Tuesday last, and was referred to a Committee. Sir H. Cairns, Mr. Walpole, Mr. Malins, and Mr. Henley made objections to some of the clauses of the Bill, which they considered should be altered in Committee.

PROFESSOR NÉLATON.—This distinguished French surgeon was present on Thursday, the 15th inst., at the London Surgical Home, when a number of operations were performed by Mr. Baker Brown: one of these was ovariotomy. A large number of foreign gentlemen were likewise present on this occasion.

LIGATURE OF THE GLUTEAL ARTERY FOR TRAUMATIC ANEURISM.—This operation was lately performed by Professor G. W. Campbell, at Montreal, on a boy aged fourteen years, who had been wounded in the buttock by a piece of iron. The abdominal aorta was compressed against the spine by means of a small book, and not half an ounce of blood was lost. The aneurismal sac contained about four ounces of coagulated blood.

EPIDEMIOLOGICAL SOCIETY.—Dr. Gavin Milroy, late Government Medical Inspector in Jamaica, and member of the Sanitary Commission to the Army in the East, and Mr. J. N. Radcliffe, formerly of the Ottoman Medical Staff, have been appointed hon. secretaries to the Epidemiological Society, in the place of Dr. J. O. M'William, Medical Inspector of Customs, recently deceased.

SALUBRITY OF SURREY.—From a comparison made by the Registrar-General of the rates of mortality in different counties, it appears that the highest degree of health in 1860 was attained in the extra-metropolitan portion of Surrey, where less than eighteen persons in a thousand living died. No other county, each being taken as a whole, presented so favourable a result.

MUNIFICENT DONATIONS.—The late Mrs. Thornton, of the Elms, West Derby, has left to the Royal Infirmary of Liverpool £10,000, for affording accommodation for the treatment of diseases peculiar to women.—The executors of the late George Oscroft, Esq., of Sutton-in-Ashfield, have paid to the treasurers of the General Hospital, Nottingham, a legacy of £200, free of duty.

MANUFACTURE OF WHITE LEAD.—Mr. C. D. Abel has patented an apparatus for the simultaneous manufacture of white lead and vinegar, in which he utilizes the acetic acid escaping from the vinegar tubs. These are placed in the basement of the building, and the acid is caused to rise into the lead-corroding room to assist in the conversion of metallic lead into carbonate of lead.

UNIVERSITY OF LONDON.—The Council of this University have given notice that the examination for degrees in the present year will be held according to the following arrangement:—Bachelor of Science, July 21st and following days. Chemistry, Botany, and Vegetable Physiology, Zoology and Animal Physiology; Examiners, Professors Miller, Williamson, Hooker, Lindley, Redfern, and Sharpey. Bachelor of Medicine, July 21st and November 23rd. Doctor of Medicine, November 24th.

APPARATUS FOR ASCERTAINING THE PRESENCE AND DEGREE OF VITALITY.—Mr. Mennons has recently patented an improved apparatus for ascertaining the presence and degree or cessation of vitality in the human body, and in animals of the higher class, applicable to the semeioses of health, disease, and death. The invention consists in a novel combination of acoustic instruments, by the aid of which the variable degrees of animal vitality in health or disease may be translated into signs of known value, and by which the transition from life to death may be verified with absolute certainty.

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—We desire to call the attention of our readers to two advertisements of this Society which appeared in the last number of THE LANCET. Those who wish to join the Society should apply at once to Dr. Merriman, 53, Berners-street, W., for a proposal paper, to be filled up and returned to him by the 4th of June. The election will be in September. Medical practitioners living within twelve miles of London or in Middlesex should avail themselves of this most excellent charity, which is not enough recognised, because its grants are given quietly, without any canvassing, and are therefore unknown to the generality of the profession.

THE ECONOMICAL MICROSCOPE.—Mr. Pillischer, the well-known maker of microscopes, has recently invented a new movable stage, remarkable for its great simplicity and complete efficiency. The motor apparatus consists of two flat metal bands, having a movable joint; the shorter of these bands is attached to the left-hand corner of the stage, and to the longer a small handle is fixed. By means of this extremely simple contrivance an object standing in the field of

vision can be moved in any direction with the greatest facility and nicety. Mr. Pillischer has adapted this apparatus to a microscope which he sells for £5. This instrument is furnished with an English quarter-inch object-glass, which by division makes also half and one inch glasses. These object-glasses possess good defining and penetrating properties. We have carefully examined the microscope in question, and find it to be an excellent instrument, fit for almost any description of scientific investigation; indeed, it is a marvel of cheapness, the stage movement and the object-glass being worth, without the stand, the whole of the money.

MANUFACTURE OF OXYGEN GAS.—Mr. J. Webster, of Birmingham, has recently patented an invention for treating a mixture of nitrate of soda or other nitrate with an oxide of iron or burnt oxide of zinc, for the purpose of obtaining oxygen gas, nitrogenous compounds, and the base of the salt employed. For this purpose the patentee submits the mixture to distillation in an iron retort. He condenses the nitrogenous compounds contained in the gaseous products of the distillation in water, or in any other convenient manner, and thus separates those compounds from the residue of the gaseous products, consisting chiefly of oxygen gas, which he collects in a proper receiver. The residuum in the retort at the end of the process contains the base of the salt employed, which, if it be an alkali or alkaline earth, will be in a caustic state.

JAPANESE DOCTORS. — In a conversation which the Russian Ambassador had with the Japanese, he observed that it was to be regretted that their Government had not sent over earlier enlightened envoys like themselves, who might have imparted to their countrymen the priceless benefits of our superior civilization. When the interpreter communicated this to his master, great was the surprise and indignation. "What!" he exclaimed, "because you blow your noses and make your bows and curtsies differently from us, do you suppose yours to be the right way, ours the wrong? We pay our doctors as long as we are well, and stop their pay when we fall ill until we are cured. You begin to pay them when you are ill, and fee them on till you are cured; and this is one of the many instances of your boasted superior civilization."

MELANCHOLY DEATH FROM AN OVERDOSE OF LAUDANUM.—The *Greenock Advertiser* states that on Saturday afternoon, about one o'clock, Dr. J. H. Bryson was found sitting in a chair in the back room of his dispensary, 71, Main street, Cartsdyke, in a state of insensibility, in consequence of his having taken an overdose of laudanum to relieve the pain occasioned by a spasmodic affection to which he was subject. Dr. M'Fie was instantly called in, and, after administering an emetic, had Dr. Bryson removed to his residence in Hill-street, where he received unremitting attention from Drs. Marshall, Henry, and Stewart, and the house-surgeon of the infirmary. About ten o'clock on Saturday night he had so far rallied as to be able to speak; but about midnight he began to breathe heavily, and gradually sank until three o'clock on Sunday morning, when he expired. He was about fifty years of age, and has left a widow and five children.

NATIONAL ASSOCIATION FOR THE PROMOTION OF SOCIAL SCIENCE.—The programme of the arrangements for the approaching meeting of this Association (this year to be held in London) is now nearly complete. Lord Brougham is to preside over the whole Association, and the Earl of Shaftesbury over the Congrès International de Bienfaisance. The vice-presidents are to be Earl Granville, the Lord Mayor, the Bishop of London, the Belgian Minister, Baron van de Weyer, and General Sabine, P.R.S. The general meeting is to be held in Exeter Hall, and the several sections will hold their meetings in the Guildhall, which, with the adjoining courts, has been placed at the disposal of the Association by the Lord Mayor and Corporation of the city of London, and Her Majesty's judges have consented to arrange the *nisi prius* sittings during Trinity term, so as to leave the courts free for the week of the meeting. The Royal Society and the University of London have acted with equal liberality, and placed the west wing of Burlington-house at the disposal of the Association. The Congrès de Bienfaisance will hold its morning sittings in the hall, which, with the ante-room, will be used by the Association for its evening discussions, some of which, especially those on the relative merits of the English and Irish convict systems, in which Sir J. Jebb and Captain Crofton are likely to take part, on national education, and how to test its results on the patent laws, and on quarantine regulations, are expected to excite great interest. The Palace at Westminster has been granted by the First Commissioner of Public Works and the Commissioners of Woods and Forests for a *soirée* on the evening of the 7th proximo, the arrangements for which have been placed in the hands of a committee of ladies, who purpose inviting the officers of the several metropolitan rifle corps to form a portion of the company. The Royal College of Physicians will give the Association a *soirée* on the evening of the 9th proximo, in the College-rooms, and the Reformatory and Refuge Union will on the following evening pay the Association a similar compliment in Hanover-square rooms. Several foreign *savans* have been already accredited to the Congrès International de Bienfaisance, one from Norway, eight from France, and several others from Amsterdam and Brussels. No paper to be read before the Association is to occupy more than 20 minutes, and every arrangement has been made to render the proceedings of the meeting interesting to the public and to our foreign visitors.

THE PHARMACEUTICAL SOCIETY.—The annual conversazione of this Society took place on Tuesday evening, and was numerously attended. Some remarkable experiments with the electric light, by Ladd, the optician, exhibiting the curious effects produced by it upon bubbles created by Plateau's solution of soap and glycerine, proved an attractive feature. A new element (chloride of rubidium), discovered by Dr. Muller, through the agency of spectral analysis, gave rise to some discussion among the professors, and Mr. Crookes showed a specimen of chloride of thalium. There were also some plaisters from China, which bore a remarkable resemblance to a coarse emery cloth dabbed with pitch. A whole battery of binocular microscopes, including a complicated instrument manufactured in solid silver for the late Duke of Marlborough, was also made to bear on the company. A small but valuable collection of plants, consisting of pharmaceutical remedies, occupied the greater part of one room, and amongst these were the new American medicine podophyllin, and a well-preserved specimen of the camphor tree from Japan. The museums and laboratories were much thronged. Amongst those present were Professor Brande, Drs. Redwood, P. L. Simmonds, C. W. Quin, Professor Parlatore, of Florence; Dr. Wurtz, of Paris; Von Pfailing, of Stuttgardt; W. D. Glenn, of Philadelphia, &c.

DR. COLMER COME TO TOWN: AN ENGLISH "YANKEE DOODLE."—Some little excitement was caused here during Friday and Saturday, concerning Mr. P. S. H. Colmer (son of Mr. R. S. Colmer, of this town), who passed a very successful professional engagement at Glasgow, before the examiners of both licensing boards, on the 7th and 8th inst., when he qualified himself as a licentiate of the Royal College of Physicians of Edinburgh, Licentiate of the Faculty of Physicians and Surgeons of Glasgow, and Licentiate of Midwifery. On Friday last, on hearing of the honours his son had obtained, and that he intended to return to his native town, Mr. Colmer seems to have been, as was naturally expected, very much gratified, and he determined to celebrate the event by having the bells rung. Accordingly, having given the usual instructions, on Friday evening the bells of our old parish church commenced ringing. The ringers had rung but two peals, when a note was sent by one of the churchwardens requesting them to desist. This request not being immediately complied with, a sergeant of police was despatched to enforce the command, but the ringers had obeyed the mandate before his arrival. The churchwarden says that he was acting under the orders of the vicar, but it is said influence of quite another character was brought to bear. On the following day Mr. Colmer employed the Yeovil band, who paraded the streets during the afternoon and evening in a vehicle drawn by two grey horses. Although the course adopted by Mr. Colmer in having the aid of the bells and the band to celebrate his son's success, might not, perhaps, have been in the best of taste, it must be admitted that it was fair and reasonable that, like other folks, he should have the ringing if he chose to pay for it. If it had been the son of a more aristocratic personage who had obtained the success, or if some wealthy old dotard had, to the disgust of the community, married a damsel of sixteen, the bells of St. John might have rung from morning to night without interruption. However, "A man's a man for a' that." There is no royal road to learning, and if a man distinguishes himself above his more dainty compeers, his meed of praise and his elevation in the social scale are only his due. We congratulate young Mr. Colmer on his success.—*Pullman's Weekly News.*

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, MAY 17TH.—The deaths in London in the week that ended last Saturday were 1125, the number in the pre-

ceding week having been 1249. Zymotic diseases in the aggregate were fatal last week in 292 cases. Fifty-eight deaths occurred from scarlatina, 30 from measles, 84 from typhus, and 39 from whooping-cough. Three infants died from syphilitic disease, 6 from want of breast-milk. There were 139 deaths from phthisis, 82 from bronchitis, and 50 from pneumonia.

The births were—boys, 938; girls, 932. Total, 1870.

Obituary.

JOHN RICHARD FARRE, M.D.

THIS eminent and justly revered physician, as we announced in our last number, expired on the 7th inst., at his residence in Pentonville-road, having reached his eighty-eighth year. Small indeed is the number of those who in the busy ranks of our profession attain to this advanced period of life. Nor is he whose constant business it is to direct and superintend the means which tend to the preservation of life in others always able sufficiently to care for his own. There can be no doubt that the longevity which the subject of this memoir enjoyed, notwithstanding his unsparing devotion to the duties of his profession, and the numerous illnesses incidental to a strongly-marked gouty diathesis which he from time to time suffered, was in a great degree owing to his careful habits of living, as well as to his equable temperament and finely-regulated mind.

Dr. Farre was born in Barbadoes on the 31st of January, 1775. He was the son of Richard John Farre, a physician of extensive practice in that island. At a very tender age he narrowly escaped destruction in the dreadful hurricane of 1780, which desolated that as well as several neighbouring islands, and destroyed between three and four thousand persons out of a population scarcely exceeding eighty thousand.

After the usual preliminary education, he was brought to this country by his father in 1792, and entered at the then united Schools of Guy's and St. Thomas's, where he became a diligent dissecting pupil and dresser. Having at the end of the following year passed his examination and obtained his surgical diploma, he entered the army as assistant-surgeon on the staff of the Earl of Moira, for the purpose of acquiring a knowledge of military surgery. But this expedition failing, he was allowed to resign his appointment, and he then returned to London to continue his studies. He now devoted every spare moment to dissection, and thus attracted the attention of Mr. (afterwards Sir Astley) Cooper. Here he gradually formed a volunteer class about him, and it was thence that Sir Astley Cooper took him to demonstrate for him before the College (then the Corporation) of Surgeons, in his first lectures given before that body.

In the following winter the subject of this memoir sailed from England in the unfortunate fleet under Admiral Christian, and narrowly escaping shipwreck, the fate of many others, in a stormy and perilous voyage of fourteen weeks' duration, after seeking shelter in Grand Canary, he ultimately reached Barbadoes. Although the voyage was only intended as a visit to his family, he soon found himself extensively engaged in operative surgery, and was appointed surgeon to the St. Michael Regiment. Here he remained until 1797, when he recrossed the Atlantic with his countryman, Mr. (afterwards Dr.) Jones, the author of the well-known work on Hæmorrhage, whose education was entrusted to his direction.

In 1798, he married the only daughter of William Crawley, Esq., and endeavoured to settle in London; but the health of his parents demanding his presence, he re-visited Barbadoes, where he again practised both surgery and midwifery, until finally in 1800 he returned to this country; and after having resided the time required by the London College at Edinburgh, where he attended the lectures of Andrew Fyfe, Dugald Stewart, Drs. Hamilton and Gregory, he graduated at Glasgow in 1802, and two years afterwards commenced practice in London.

In 1804, he undertook the publication of his friend Dr. Jones's work on Hæmorrhage, and largely confirmed the facts contained in it previously to its coming before the public. He also in the same year assisted his friend, Mr. John Cunningham Saunders, in establishing the Infirmary for Diseases of the Eye, now the Royal London Ophthalmic Hospital, of which he may justly be considered the joint founder.

In 1806, after graduating a second time at Aberdeen, he was admitted a Licentiate of the College of Physicians, and was on after appointed Physician to the London Dispensary, the duties of which office he continued to discharge until 1810. In the same year his friend Mr. Saunders died, and in 1811 he published his posthumous work, to which he added a short account of the author's life, and his method of curing congenital cataract, illustrating the facts contained in the work by a variety of plates.

From this period onward to the end of his public career, the time which he was able to spare from private practice was devoted almost exclusively to two main objects, with which, more than any others, his name will be professionally associated. The first of these was, the extension of the Ophthalmic Infirmary, of which, in conjunction with his colleagues, Messrs. Travers and Lawrence, he was a most efficient and constant supporter; and to this charity he gave all the aid of his influential connexion, in addition to the employment of his time and talents for its benefit. The second great object which he had in view was, the advance of the study of Morbid Anatomy and Pathology, at a time when comparatively slight attention had been given to this important branch of medical knowledge. Influenced in a great degree by the efforts of Dr. Matthew Baillie in the same direction, he determined to devote his energies towards placing morbid anatomy and pathology on a more solid basis; and his essays on the Malformations of the Human Heart and on the Morbid Anatomy of the Liver serve to show his capacity for the work which he had undertaken, and further tend to increase the regret, that of the very large amount of material which he is known to have collected, with the same view, so small a proportion should ever have been given to the public. The principal cause of this was the large and constant demands upon his time which an extensive practice occasioned; so large, indeed, that when, at the age of forty-eight, he found his health giving way, he came to the resolution that the only method of preserving his life would be to confine himself entirely to consulting practice, and for this purpose he threw off all business in ordinary, and from that time refused the sole charge of cases. Thus he continued to enjoy in a large degree the confidence both of the public and of the profession until the year 1850, when, at the age of seventy-five, he gave up his professional residence in Charterhouse-square, and retired for a time to St. Leonards. But returning after a year to his private house at Pentonville, he rarely saw patients, and finally in 1856 he resigned his appointment of Consulting Physician to the Ophthalmic Hospital, and withdrew entirely from practice.

Besides the works already enumerated, Dr. Farre contributed some papers to the "Medico-Chirurgical Transactions" and the "Medical Records and Researches." He was also the editor of the "Journal of Morbid Anatomy and Pharmaceutical Analysis," of which only one number appeared.

In personal appearance and manner, the deceased physician was more than usually favoured. A fine commanding presence, handsome and remarkably benevolent countenance, a large well-formed head, with a brow expressive of great intellectual power, and a full rich voice, with which he expressed himself with remarkable accuracy and elegance of diction,—these combined to impress most favourably all who saw him. His portrait by the elder Phillips, painted in 1837, when he was in his sixty-second year, and presented to the Royal London Ophthalmic Hospital by his former wards, the Messrs. Bovell, serves to convey an excellent idea of Dr. Farre's personal appearance when he had reached his prime.

When the alterations took place in the bye-laws of the College of Physicians, which dispensed with an Oxford or Cambridge degree as a necessary prelude to the Fellowship, the latter was offered to Dr. Farre; but this he respectfully declined, preferring to remain in the order of the Licentiates, with whom he had been always associated.

DR. W. C. HUMPHREY,

INSPECTOR-GENERAL OF HOSPITALS.

This active medical officer expired suddenly at Malta on the 28th ult. The services of Dr. Humphrey extended over a period of thirty-six years on full pay, the greater part of which was on foreign service in the West Indies, Canada, Crimea, and Mediterranean. Previous to his departure for Malta, he held the arduous posts of principal medical officer at Dublin and Aldershott, and was universally esteemed and respected by all who served under him.

DR. JOHN RICHARDSON,

INSPECTOR GENERAL OF HOSPITALS.

This gentleman died on the 11th inst., at his residence, Mountjoy-place, Dublin, in the seventy-eighth year of his age.

He entered the army in 1805, when he joined the expedition to South Africa, and was present at the capture of the Cape of Good Hope. He served in the Peninsular army until the close of the war. Dr. Richardson was most actively employed in the Mediterranean for seventeen years, and again in the West Indies, where he remained more than thirty years.

MEDICAL VACANCIES.

THERE is a vacancy for a Medical Officer in the Walsingham Union.

Dr. Browne, R.N., has resigned as Medical Officer, Belfast Union.

The office of Apothecary to the Meath Hospital and County Dublin Infirmary has become vacant by the death of Mr. John James Parr.

A Tancred studentship in physic, at Gonville and Caius College, Cambridge, is now open to competition; it is tenable until the degree of Bachelor of Physic, and for three years afterwards, with a stipend of £100 a year.

Mr. Parish has resigned as Medical Officer of the Stourbridge Union.

A Resident Surgeon and Apothecary is required for the Western General Dispensary, Marylebone-road.

Vacancies have occurred in the Hospital for Sick Children for a Physician and an Assistant-Physician.

MEDICAL APPOINTMENTS.

DR. HUGHLINGS JACKSON has been appointed Assistant-Physician to the National Hospital for the Paralysed and Epileptic, Queen-square.

Mr. Teevan has been appointed Surgeon to the St. George's and St. James's Dispensary.

Mr. John Jeffs Sparham has been appointed Medical Officer to the Ashburton and Islington Districts of the Newton Abbot Union, Devonshire.

Mr. William Dunnett Spawton has been appointed Resident Obstetric Assistant (a newly-created office) at the Middlesex Hospital.

Mr. John Morgans has been appointed Medical Officer for the Huntington District of the Kington Union, Herefordshire.

Dr. George Yeates Hunter has been appointed Medical Superintendent of the Margate Branch of the Deaf and Dumb Asylum, Old Kent-road.

Mr. Joseph Vardy has been re-elected Medical Officer and Public Vaccinator for the Eastern District of the Rothbury Union, Northumberland.

Mr. John Marshall, F.R.S., has been elected Fullerian Professor of Physiology at the Royal Institution of Great Britain, Albemarle-street.

Dr. Arthur Scott Donkin and Charles John Gibb have been appointed Examiners in the Faculty of Medicine at the University of Durham.

Dr. Dennis Embleton has been appointed Reader in Medicine, and Thomas Richardson, M.A., has been appointed Reader in Chemistry.

Dr. Ryley has been appointed Medical Officer to the Second District of the Chippenham Union, Wilts.

Dr. Michael Delany has been elected Medical Officer for the Kilmeaden Dispensary District of the Waterford Union.

Mr. Abraham Thomas has been appointed Medical Officer to the Great Horton District of the Bradford Union, Yorkshire.

Mr. William Stawman has been appointed Medical Officer to the East District of the Barnsley Union, Yorkshire.

Births, Marriages, and Deaths.

BIRTHS.

On the 15th inst., at Totnes, Devon, the wife of Lewis Harris, Esq., M.R.C.S., of a son.

On the 16th inst., at 16, King's-place, Commercial-road, the wife of J. W. Kay, Esq., M.R.C.S., of a daughter.

On the 17th inst., at Richmond, Surrey, the wife of Archibald Gordon, M.D., C.B., Principal Medical Officer in the Mauritius, of a daughter.

On the 18th inst., at Lion House, Budleigh Salterton, South Devon, the wife of Joseph Beuval Murphy, M.D., of a son.

On the 19th inst., at Woburn-place, the wife of James Jones, M.D., of a son.

On the 20th inst., at Cromer, Norfolk, the wife of Henry John Buck, Esq., M.R.C.S., of a son.

MARRIAGES.

On the 22nd April, at Christ Church, Georgetown, Demerara, Euan M'Laurin Smith, Esq., M.B., eldest surviving son of the late Euan M'Laurin Smith, M.D., Colonial Surgeon-General, to Agnes Jane, only daughter of the Rev. William Fox, M.A., Incumbent of Christ Church.

On the 14th inst., at St. Mark's, South Norwood, Briton Hodges, Esq., M.R.C.S., to Sarah Anne Frances Lakeland, youngest daughter of the late Rev. John Lakeland, M.A., Vicar of West Burton, Notts.

On the 15th inst., at St. John's, Hackney, E. M. Davey, L.R.C.P.E., of Florence Villa, Old Ford, to Anne, daughter of the late Charles Quelch, Esq., of Brompton.

On the 20th inst., at St. Saviour's, Paddington, William Scott, M.D., son of Captain Scott, R.N., Odiham, Hampshire, to Mary Sophia, daughter of Henry Hegg, Esq., J.P., of Davenshaw House, Congleton, Cheshire.

DEATHS.

On the 2nd inst., at Addison-road North, Notting-hill, the infant son of Henry Robert Davis, L.R.C.P. E., aged 1 month.

On the 3rd of March, at Magill, Australia, David Wark, M.D., aged 55.

On the 9th inst., at Everett-street, Russell-square, Thomas Kitelee, Esq., L.S.A., aged 59.

On the 16th inst., at Eckington, Mary West, infant daughter of John Thomas Jones, Esq., M.R.C.S., aged 6 months.

On the 17th inst., at Melville-street, Edinburgh, Henrietta, widow of the late William Cullen, M.D., and youngest daughter of the late Sir Henry Pardoe.

On the 17th inst., at Stoke Newington, Catherine Mary, only surviving daughter of W. M. Cooke, M.D., Trinity-square, aged 45.

Medical Diary of the Week.

MONDAY, MAY 26

ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
METROPOLITAN FREE HOSPITAL. — Operations, 2 P.M.

TUESDAY, MAY 27

GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—4 P.M. Rev. G. Butler, "On the Art of the last Century."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY OF LONDON.—8½ P.M. Mr. Syme, "On the Cure of Iliac Aneurism." — Mr. Toynbee, "On Necrosis and Extrusion of the Cochlea."—Mr. Brodhurst, "On Reduction of Old Dislocations."

WEDNESDAY, MAY 28

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 1 P.M.

THURSDAY, MAY 29

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 1 P.M.
LONDON HOSPITAL.—Operations, 1½ P.M.
GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
LONDON SURGICAL HOME.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Dr. Lyon Playfair, "On Progress of the Chemical Arts (1851-62)."

FRIDAY, MAY 30

WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
ROYAL INSTITUTION. — 8 P.M. Mr. T. Baxter, "A Plea for Cotton and for Industry."

SATURDAY, MAY 31

ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Anderson, "On Agricultural Chemistry."

To Correspondents.

A Student of Physiology asks, "Has the brain-substance any sensibility?" Our most popular text-book upon Physiology asserts that "all the results of experiment concur to establish the fact that no irritation either of the vesicular or of the fibrous substance produces either sensation or motion." Our correspondent will do well, however, to weigh against these results the histories of one or two cases lately recorded in an American medical journal by Dr. Wilson, of the 3rd Regiment of Michigan Infantry. They may illustrate only the exception, and not the rule; still they must not be forgotten.

Delta.—If the particulars of the case be forwarded to us, they shall be inserted.

SANITARY CONDITION OF LIVERPOOL.

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 10th, I observe that Dr. Kebbell quotes Dr. Greenhow's authority for the statement that Liverpool is the most unhealthy town in the kingdom. Allow me to inform Dr. Kebbell that the "Liverpool" referred to throughout Dr. Greenhow's valuable volume is not the *borough*, but the *parish* or "registration district" of Liverpool, which comprises only about three-fifths of the borough population. For various reasons, which I need not occupy your space by mentioning, the mortality of this district is considerably higher (about 6 per 1000) than that of the remaining portion of the borough, the death-rate of the entire borough being about 3 per 1000 lower than that of the registration district. Any comparison of the mortality of the worst portion of a town (in point of poverty, density of population, and structural conditions) with that of another town in the aggregate, must be obviously unfair.

I may add that Dr. Greenhow's statements affecting "Liverpool" refer to the six years 1849-54, since which period the death-rate of the borough has been reduced by more than 4 per 1000 (on an average of the last seven years), and the yearly deaths have been about 4000 fewer than would have been the case had Dr. Greenhow's data applied to the borough, and not the parish, of Liverpool. There is no doubt that in contrasting the mortality of Liverpool with that of other towns, Dr. Greenhow was under the impression that the "registration district" was coterminous with the borough; but he has since become aware of his mistake. The registration district contains, in round numbers, 270,000 inhabitants; the borough, 450,000.

Mr. Chadwick's statistics, also referred to by Dr. Kebbell, are still more antiquated, applying, as they do, to a period about fifteen years prior to those of Dr. Greenhow, and long antecedent to the operation of the Liverpool Sanitary Act. I think Dr. Kebbell will allow that no accurate conclusion as to the condition of things in 1862 can be drawn from their condition in 1840, when sanitary improvements were only talked of. It may be added that Mr. Chadwick's statistics also apply to the registration district, not the borough, of Liverpool.

Under the provisions of the Liverpool Sanitary Act, which came into operation in 1847, more than two millions sterling have been expended, and, as the Registrar-General remarks, "the expenditure has borne ample fruits." No other town in the kingdom can show the same ratio of improvement.

Your obedient servant,
W. H. DUNCAN, M.D.,
Medical Officer of Health for Liverpool.

May, 1862.

Enquirer.—The school of Dublin has always been regarded as a very good and essentially practical one. We are sorry, however, to find Dr. Corrigan, in his recently published "Ten Days in Athens," expressing his fears that Dublin, under present arrangements, cannot continue to hold the high position it has hitherto occupied as a medical school, considering that the facilities for travelling are now so great that places which a few years since were out of the reach of the student are at present easy of access. Dr. Corrigan informs us that the school in question now numbers about 1000 students annually—850 attending medical classes, and 150 exclusively hospital pupils. "Computing each student, at the lowest calculation, as expending in maintenance, clothes, books, &c., £100, there is an outlay in Dublin of £100 000 annually, of which not more than £15,000 is received in fees by the professors and schools of medicine in the city; so that the trading community—shopkeepers, lodginghouse-keepers, booksellers, &c.—are benefited to the amount of £85,000 annually." If Dr. Corrigan's surmises and calculations be correct, the decadence of Dublin as a school will hurt the community rather than the profession.

L.S.A.—The plan suggested will eventually be put into practice.

REMARKS ON THE HISTORY AND CULTIVATION OF MEDICINAL RHUBARB.

To the Editor of THE LANCET.

SIR,—Although the first introduction of medicinal rhubarb into England is dated by Parkinson as far back as 1629, no real experiments in its culture and preparation for medical use appear to have been made till 1762, when a quantity of seed was sent from Russia by Dr. Mounsey; from which period till about 1800 it was successfully grown in small quantities by many scientific men, after which it was grown at Banbury on a largely increasing scale, and is now well known in the commercial world as a general article of trade; and not only is it consumed in considerable quantities in this country, but is exported largely to various parts of the civilized world.

The great success which attended the efforts of the first growers is shown by the fact that a number of gold medals were awarded to the producers by the Society for the Encouragement of Arts, Manufactures, and Commerce, a full account of which may be seen in the "Philosophical Transactions" of the Society. As a further proof that it had during the first period of its cultivation gained the confidence of scientific men, it may be stated that in 1798 rhubarb of British growth was used at St. Bartholomew's, St. Thomas's, and Guy's Hospitals, and was being experimented on at several others. According to the testimony of Sir Alexander Dick and Dr. Hope, of Edinburgh, in 1784, but little rhubarb was used by the apothecaries of that city but what was produced in Scotland, and it was considered in no respect inferior to Russian. About the same time English rhubarb was put to a severe test at Bath by Drs. Falconer, Parry, and Fothergill, all of whom attested its merits. Dr. Falconer remarked that two of the specimens of English rhubarb submitted to them answered in external marks to the character of the foreign; that they were rather inferior in delicacy of taste to Turkey, but superior in other respects to East Indian. In 1810, Dr. Thornton, then Lecturer on Botany at Guy's Hospital, referring to the encouragement given to the cultivators by the Society before referred to, makes these remarks:—"This account may serve to show both the ardour of this respectable Society in encouraging the growth of this useful article, and the persevering industry of some gentlemen in overcoming all the difficulties attendant on introducing a new plant into cultivation, finding out the means of curing it as an article for extensive sale, and overcoming the prejudices of such as cannot persuade themselves that a drug of British growth can bear a competition with what is sent us from foreign countries."

If at a later date the prejudice against English rhubarb increased, there must have been other causes than those existing previous to the more extended cultivation of the plant which took place about 1811. One cause of the subsequent change in public opinion may have arisen from the partial introduction of new varieties of the plant. From the earliest period in the history of the plant there appears to have been a confusedness in the evidence as to its real character, and whether foreign rhubarb is produced from the rheum palmatum or the rheum undulatum, yet remains an unsettled question. As far as this question relates to rhubarb grown in Great Britain, the stronger probability is, that, after it was imported, several varieties were produced by repeatedly propagating from seed, when a discrepancy was observed at variance with the earliest descriptions recorded. To show the extent of these changes, I may remark that in the last instance in which I observed the effect of seedling propagation (now thirty years since) I found the stalks and leaves more than double the size of those produced from offsets—a circumstance sufficient to account for the introduction of such varieties as the Victoria and other large sorts now grown so extensively in our gardens, and which still continue to work change upon change. So convinced have I been for a long period of the injurious tendency of this system, that I have studiously avoided the use of seed altogether, and the plant has now so far receded to its original type that, from an average plantation of from twelve to fifteen acres, not one plant has ripened seed during the last twelve years. It is a fixed trait in the history of the plant now cultivated for medicinal purposes, as it is in most, if not all, bulbous plants, that if propagated only from offsets, it ceases to produce seed; and if raised from seed, each successive generation produces seed also, adding variety to variety almost indefinitely. Assuming as an incontrovertible fact that the plant has now for such a lengthened period been produced from offsets as to be incapable of bearing seed, it will guarantee the conclusion that, if during a number of years, when its cultivation was pursued by a large number of growers for the purpose of making experiments, and each one, in haste to enlarge his growth, resorted to seed propagation, it degenerated from external causes, it is equally logical to infer, that the causes having ceased which led to its deterioration, it has now retained its specific distinction, and is not likely to diverge again into any transition from its central type.

It is thus quite possible to account for the previous deterioration of this plant for medical uses, which caused the strong prejudice existing for many years against, and the doubts still expressed respecting the real properties of, English rhubarb; but that a reaction has taken place in its favour since the plant has been restored to its primitive form of development there is ample testimony, not only in the increased demand for it at home and abroad, but in the evidence of eminent medical practitioners.

The plantations which now supply the market originated from one of the best possible sources, nor has any other species or variety been added beyond what may have arisen from the injudicious practice of sowing instead of planting. Dr. Pereira remarks that "in 1720 Dr. Hayward obtained a silver medal, and in 1794 a gold medal, from the Society of Arts for the cultivation of English rhubarb. Dr. Hayward died in 1811, and the plants were purchased by Mr. P. Usher." I refer to this circumstance to show the source from which the plantations were derived, which have supplied the market with medicinal rhubarb for the last half century.

In addition to the improvement which has become apparent in the plant by the entire exclusion of seedlings, an important change has been effected in the mode of drying, by exchanging a high artificial temperature for a more gradual one, the process in the first stages being effected out-door by the application of a strong current of atmospheric air, which has not only greatly condensed the root and rendered it less porous, but has given it an appearance approximating more closely to foreign. Another error practised at a former period was that of taking up the roots before they had reached maturity, a practice which is now obviated.

A great error almost invariably committed in passing judgment on any article of supposed inferiority is to judge it by an improper standard. This has been pre-eminently so in the present instance. To show that one sample is of bad quality is certainly not proving that another is good; but when an attempt has been made to prejudice the public against the use of English rhubarb, it has sometimes been done by putting it into competition with the very choicest specimens of the foreign article. If it is true that a great difference exists in samples of drugs generally, it is still more so in those of foreign rhubarb. Can it be substantiated that one-half or even a third of the rhubarb imported into this country is of the best quality? On the other hand, can it not be shown that there is as wide, if not a wider, range in the various qualities than in almost any other article of commerce? This fact did not escape the notice of Dr. Pereira. He remarks—"When China or East India rhubarb arrives in London, it is hand-picked, tared, and sorted into three qualities: bright and sound, dark and horny, and worm-eaten." He adds the following evidence on this point:—"In 1840, when China rhubarb was very scarce, a quantity of foreign rhubarb imported from Calcutta was sold, some at 4*d.* and some at 1*d.* per lb."

As the evidence arising from dissimilarity of price has been frequently used as an argument to show the inferiority of English to foreign rhubarb, the following facts may deserve notice:—In the years 1846 and 1847 there was a very large quantity of foreign rhubarb disposed of, amounting to several tons weight, and such was its general quality and condition, that the terms made use of to designate it in the sale bills, with the prices realised, were as follows: Old and bastard, at ½*d.* to 1½*d.* per lb.; old brown and rotten, 1*d.* to 4*d.*; rotten and damaged, 3*d.* to 5*d.*; brown old and perished, 1*d.* to 6*d.* During these periods large quantities of English rhubarb were sold at from 1*s.* to 2*s.* per lb. Thus it is seen that if the maximum price of foreign is higher than English, the minimum price of English is higher than foreign.

During the very protracted inquiry before a Committee of the House of Commons in the years 1855 and 1856 on the adulteration of food, drinks, and drugs, a rigid investigation was instituted respecting the character and value of English rhubarb; and although I can do no more in the limits of this letter than direct the reader to consult the Blue-book, containing a large mass of evidence on the question, I may add that there was a large preponderating balance in its favour, which may fairly be inferred from the following remarks of the chairman of the Committee during one of the examinations:—"If it be represented to the Committee that English rhubarb is sold as an adulterating article, and is of a very inferior quality to foreign, that is a mistake; for medical men attribute very important medical qualities to English rhubarb, and it is consumed in some important public establishments, and is held by very high medical testimony to be exceedingly useful as to medicine."

This is not an age when scientific research can be baffled in its inquiries; and as the article in question is now placed before the public at the International Exhibition, no more will be anticipated from its inspection by a competent tribunal than the closest scrutiny will justify.

I remain, Sir, yours, &c.,

Bodicott, May, 1862. RUFUS USHER.

K. C. N.—Even though the description and statement may be correct, the communication could not be inserted in its present form.

A Constant Subscriber.—1. It is supplied in some hospitals.—2. Certainly not justified.

POOR-LAW MEDICAL REFORM.

To the Editor of THE LANCET.

SIR,—Permit me to correct one error which I have unintentionally written in my letter on this subject in THE LANCET of last week. I therefore unreservedly expunge the faulty words—"(as does Mr. Griffin's plan)."

Your obedient servant,

Bishopsgate-street Without, May, 1862. ROBERT FOWLER, M.D. Edin.

THE communications of Dr. Granville on "Self-supplying Sponge Pessary," Mr. S. Ainsworth on "Preservation of Animal Food," and Dr. R. S. Sisson on "Podophyllin," are in type, but postponed until next week.

A Reader wishes to know where the "Hospital System of London, 1856," can be procured.

CAN A FROG EXIST IN THE STOMACH?

To the Editor of THE LANCET.

SIR,—Will you kindly allow the following curious account to appear in your journal, with a view that some intelligible explanation may be given of it by your scientific and practical medical subscribers:—

A day or two ago, a woman, the wife of a labouring man, parishioners of mine, came to me and asked me what I thought of "water-cresses;" to which I replied that I believed them very wholesome. She explained she could not think so; for having eaten some a few days ago, she has since felt the sensation of having a frog or a toad in the pit of her stomach, which, she says, she can feel plainly, and that it moves about in her, making its way towards the left side. She states also that it increases in size, and describes it as something of an oblong or egg shape. She complains of its making her feel ill, and especially when it moves about in her. She feels positive that it is some animal, and is rendered the more certain of it as her neighbours have related stories to her of a young woman having vomited up a frog, which they had read in a newspaper; and besides, that a man died in the neighbourhood some years ago, when, on being opened, a toad of the weight of seven pounds was taken from him. These different stories prey upon the old woman's mind, and confirm her in her belief that she has some such monster within her.

In the event, however, that such a thing may be possible (though I cannot believe it to be probable), perhaps some of your readers would kindly suggest some remedy for expelling the unwelcome guest, or at least of soothing the mind of its entertainer. By doing which you will be benefiting a parishioner of mine of the labouring class, and poor in circumstances, and obliging,

Your faithful servant,

Norwich, May, 1862. J. M. W., the Rector of the Parish.

Income-Tax.—Mr. Hubbard's motion was negatived, as was generally expected. The arguments used in opposition to the just proposals of Mr. Hubbard were of the hackneyed and stereotype character. It is admitted on all sides that there would be great difficulties in carrying out the plan suggested; but that these difficulties might be overcome there can be no question. There is not at the present time sufficient influence brought to bear on the Chancellor of the Exchequer to induce him to modify this odious tax.

POOR-LAW MEDICAL REFORM ASSOCIATION.

To the Committee of the Poor-Law Reform Association.

DEAR SIRS,—As you are all aware, Dr. Fowler has again been examined before the Select Committee, and has laid before them his private plan of a payment based on pauperism, which, I am satisfied, will be very injurious to most of the medical officers, particularly in the country districts. It is very desirable we should take immediate steps to point out to the Select Committee the objections to his plan; but prior to doing this, I desire to consult you in regard to our own plan, which, if we can somewhat modify, may possibly be the means of healing the breach Dr. Fowler has made in our ranks.

You are aware that in order to lessen the objection of the guardians to the enormous sums that would have to be paid to the medical officers in each of the London districts, and such large places as Liverpool, &c., I have named 2s. per patient after the first 300 cases. This has always been a sore point with some of the London men, as they say "the harder they work the less they will obtain." I have, therefore, drawn up the annexed modification of our plan, by which all will be paid at the same rate.

The average duration of illness in large towns, where the cases are numerous, and there are hospitals, is about three weeks, and therefore the officers in these places would receive, on an average, about 3s. per patient; in the country districts, from the absence of hospitals, and the large number on the permanent list, compared with the other cases of sickness, the average duration of illness is about five weeks, and therefore the officers in the country districts would have about 5s. per patient. Further, this plan would meet the case of epidemics, and persons, not paupers, whom we are now called upon to attend. Trivial cases, such as extracting a tooth, would then be paid for at 1s. Be good enough to give me your opinion of this plan, for in the multitude of counsellors there is wisdom.

I am, dear Sirs, faithfully yours,
12, Royal-terrace, Weymouth, May 20th, 1862. RICHARD GRIFFIN.

P.S.—Upwards of 500 subscriptions have been received this year.

Proposed Modification of Regulation XV.

From and after the 24th day of June next ensuing, the salary of the present and all future medical officers shall be fixed in accordance with the number of patients and average duration of illness. The calculation shall be made on an average of the last three years, and annually, for three years, a fresh calculation shall be made on an average of the three preceding years, after which a triennial calculation shall be made. But should any dispute arise as to the number of patients or the duration of illness, then the Poor-law Board shall settle such dispute, or may direct that the payments shall be made in accordance with the number of patients the medical officer may in future attend and the duration of illness; but after three years the salary shall be fixed on a triennial calculation in the manner already described. The salary shall be calculated at not less than 1s. per week per patient, so long as his name appears on the book of the medical officer, and he has been seen by the medical officer either at his own residence or that of the medical officer, or at a dispensary, or has had medicine, the last entry of such visit, attendance, or medicine to be considered a termination of the case; but should such last entry appear on or after a board day, then the patient shall be considered as being on the book for the ensuing week. Provided, however, that where the guardians find the medicines for the sick poor, then and in such case one-third of the said annual fixed salary shall be deducted from the payments proposed to be made to the medical officer.

In addition to the above payments, there shall be paid a further sum to be called mileage, &c. &c., as already laid before the Select Committee.

T. W. (Louth) should address himself to Mr. Harris, optician, Great Russell-street, Bloomsbury.

J. L. M.—It has not yet been arranged.

M.D., (Normanby.)—Sir Ranald Martin on Diseases of Tropical Climates.

ROYAL MEDICAL BENEVOLENT COLLEGE.

To the Editor of THE LANCET.

SIR,—Allow me to thank you sincerely for your extremely appropriate remarks upon the above admirable institution. You hit the nail on the head more forcibly than many are aware of. I am repeatedly applied to for my votes by wealthy people, who have no objection to be kind to the unfortunate and distressed *at other people's expense*. To each I always reply that I attend to the solicitations of those who are my fellow-subscribers, but to none besides. This answer has in two instances produced something more than a blush, for it has obtained two annual subscribers, and if universally practised I have no doubt would have a good result.

I am, Sir, your obedient servant,
Bromyard, May, 1862. E. W. HOWEY, M.R.C.S.

A Ten Years' Subscriber.—1. It is contrary to professional etiquette.—2. Yes, we think so.

J. C.—It is all moonshine.

Justice has mistaken the point in the remarks. The "eminence" attained is not the questionable one of a fellowship or any other title.

MANUAL OF COMPARATIVE ANATOMY.

To the Editor of THE LANCET.

SIR,—In answer to your correspondent, "Cantab.," in your Journal of May 10th, I have the pleasure to inform him that there is a work especially devoted to the dissection of animals, by Messrs. Tulk and Henfrey, the title of which is as follows:—"Anatomical Manipulation, or the Method of Pursuing Practical Investigations in Comparative Anatomy and Physiology." Fcap. 8vo, plates, 1844.
Your obedient servant,
Springfield Lodge, Regent's Park, May, 1862. H. L. MAYNOR, M.D.

Mr. Reed (Bloomsbury-square) inquires what is the plant known as Nardoo in Central Australia, and whether the seeds are poisonous. An exploring party was found dead, and suspicions are entertained that they were poisoned by the plant in question.

A Young Surgeon.—Apply to Mr. F. G. Moore, 14a, St. Mary Axe, E.C.

THE ORPHAN CHILDREN OF THE LATE DR. JONES, OF DEPTFORD.

To the Editor of THE LANCET.

SIR,—Will you kindly find me space in your journal to mention that a servant in detail of the money received on behalf of the orphans of the late Dr. and Mrs. Jones, and the method of applying it, will be forwarded in a few days to every contributor to the fund whose address is known to,

Your obedient servant,
Bucklersbury, May, 1862. B. B. ORRIDGE.

The following additional subscriptions have been received:—

R. Tippetts, Esq.	...	...	...	...	£1	1	0
Dr. Waggett	...	...	...	...	1	1	0
Dr. Casidhan	...	...	...	...	1	1	0
T. A. Freeman, Esq.	...	...	...	...	0	10	6
B. Baker, Esq.	...	...	...	...	0	10	6
Dr. Hudson	...	...	...	...	0	10	0
T. D. Everet, Esq.	...	...	...	...	0	10	0
R. Hands, Esq.	...	...	...	...	0	10	0
Anonymous	...	...	...	...	0	10	0
R. T.	...	...	...	...	0	10	0

THE GALIUM ALBUM IN EPILEPSY.

To the Editor of THE LANCET.

SIR,—"M.B. Exoniensis," in your journal of the 3rd instant, requests information respecting the galium album as a remedy for epilepsy. I am acquainted with two cases in which it was fully tried, and found of no efficacy. I have before me a letter from a gentleman (a colonel in the army) relating to one of the cases. The following is an extract:—"Last year we visited Tain, at Tuernon, in the south of France, to consult a Count Larnage, who has the reputation of being able to cure this disease (epilepsy) by a herb which grows on his estate, the galium album, or lady's bed-straw; but this, in combination with other remedies, we found useless."

The patient was a fine blooming little girl, ten years of age, not then seven affected with epilepsy. In the other case it was a male, aged about twenty.

I believe several species of the galium, or bed-straw, grow as weeds in this country, as well as in France.
I am, Sir, yours obediently,
May, 1862. J. R.

CAYENNE PEPPER IN DELIRIUM TREMENS.

To the Editor of THE LANCET.

SIR,—Without advocating Dr. Kinnear's mode of treatment, I feel bound, in justice to that gentleman, that during a residence of seven years in the island of Jamaica I never heard of Cayenne pepper having been used as a remedy in delirium tremens.

During the great cholera epidemic at Jamaica in 1851, pills composed of bread mixed up with the juice of the hot fresh capsicum were administered with good effect in checking the obstinate vomiting in the disease.

I am, Sir, yours, &c.,
Malta, May, 1862. AN OLD SUBSCRIBER, AND ONE OF THE SOLDIERS.

THE CAUSES OF HEMORRHOIDS.

To the Editor of THE LANCET.

SIR,—Having a very sensitive mucous membrane, I have given much consideration to its diseases, and am inclined to think that disease of the lower part of the rectum frequently arises (independent of piles, &c.) from using printed paper freely; men, for a reason, suffering most.

Perhaps you may think this suggestion from an old subscriber worthy a place in your valuable journal.
Your obedient servant,
Brompton-crescent, May, 1862. T. C. WOOD, M.D.

The Pierpoint Fund.—The following subscriptions have been received since our last:—J. P. Garlick, Esq., £1 1s.; J. J. Cregeen, M.D., 5s.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Granville; Dr. Wiblin; Mr. Moore; Dr. T. K. Chambers; Mr. Shand, Stirling; Dr. H. Mayssrar; Mr. C. Taylor, Bow; Mr. Truman, Nottingham; Dr. Skinner, Liverpool; Dr. Clancy, Mitchelstown; Mr. Jack, (with enclosure;) Mr. R. Davis; Dr. Wood; Dr. Farre; Mr. Barrow, Newmarket, (with enclosure;) Mr. Payne, Macclesfield, (with enclosure;) Dr. Baylis, Ceylon; Dr. Sanders; Mr. Westbury, Manchester; Mr. Pindar; Messrs. Allen and Hanburys; Mr. Masters; Dr. Fergus, Marlborough; Mr. Condy; Mr. Howay, Brompton; Mr. Acton; Messrs. Thomas and Co., Exeter; Dr. Walker; Mr. G. Allen, Batley; Mr. Griffin, Weymouth; Dr. Tilt; Mr. Lyon; Mr. Brown, Ellesmere, (with enclosure;) Mr. W. M'Keard, Paisley; Mr. Hamilton, Newbury; Mr. Moorhead, Lurgan; Dr. Fowler; Mr. Ellis; Mr. L. Davies, Oswestry; Mr. Hunt, Biggleswade, (with enclosure;) Mr. Austin, Bootle, (with enclosure;) Messrs. Hoitsundahl, Holst, and Co.; Messrs. Curtis and Co.; Dr. Crosse, Norwich; Mr. Whitford; Mr. Weedon Cooke; Dr. Steggall; Mr. R. Kent, Cork; Mr. Farncombe, (with enclosure;) Mrs. Colonel Holloway, (with enclosure;) Dr. Lankester; Mr. R. Bingham; Dr. Duncan, Liverpool; Mr. Fleischmann, Tunbridge; Messrs. T. Lemale and Co.; Mr. Partridge, Birmingham; Mr. Hodson, Battersea, (with enclosure;) Dr. Gill, Dover, (with enclosure;) Dr. Cregeen, Deptford, (with enclosure;) Mr. Thedd, Cambridge, (with enclosure;) Mr. Hutton, Ridgway; Dr. Davey, Walmer, (with enclosure;) Mr. Braund, Ashmartock; Mr. Chalmers, Prescot, (with enclosure;) Mr. F. W. Cooper; Dr. Williamson; The Secretary of the Asylum for Idiots; The Cancer Hospital; A Constant Subscriber; Beton; M.R.C.S., Soho; Kappa, (with enclosure;) The College of Dentists; Z., (with enclosure;) M.R.C.S., (with enclosure;) K. L. M.; M.D.; &c. &c.

VOLUME TIGHTLY